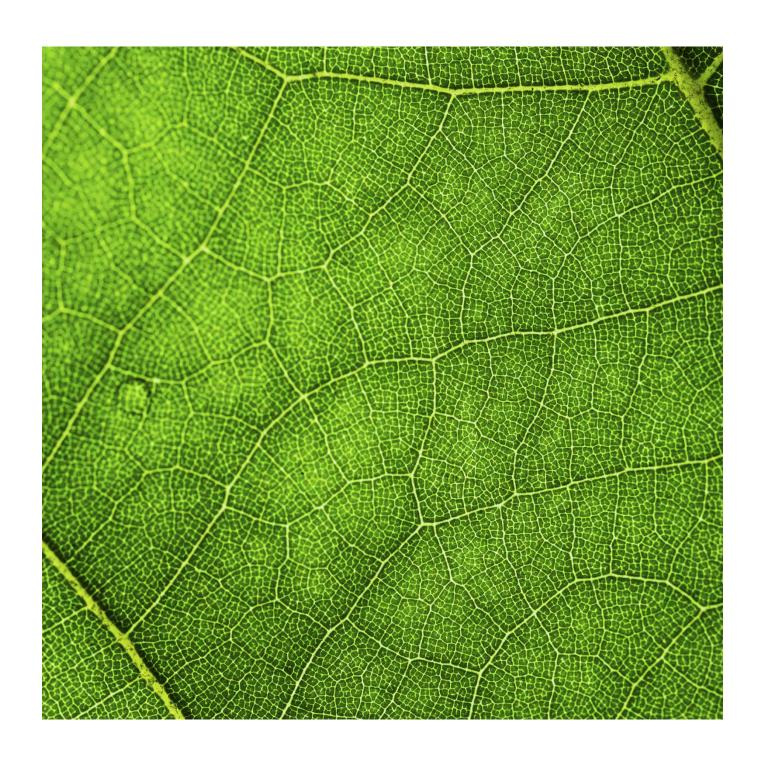


Herefordshire Council

Habitats Regulations Assessment of the Schedule of Proposed Modifications to the Herefordshire Minerals and Waste Local Plan HRA Addendum Report

Final report
Prepared by LUC
June 2022





Herefordshire Council

Habitats Regulations Assessment of the Schedule of Proposed Modifications to the Herefordshire **Minerals and Waste Local Plan HRA Addendum Report**

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1.	Draft Report	T Livingston	M Mc Ginley	T Livingston	27.10.2021
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Introduction

LUC was appointed by
Herefordshire Council in May
2022 to carry out an update to
the December 2021 Habitats
Regulations Assessment (HRA)
of the Schedule of Main
Modifications and Minor
Changes Proposed PreExamination to the
Herefordshire Minerals and
Waste Local Plan (MWLP)
(hereafter referred to as the
Schedule of Proposed
Modifications).

1.1 The Publication Draft Herefordshire MWLP¹ and its associated HRA Report² were finalised in December 2020-January 2021 and published for consultation for a six-week period from 12th April 2021. Following the Regulation 19 consultation period, the representations received on the Publication Draft Herefordshire MWLP and HRA Report were reviewed by Herefordshire Council. Herefordshire Council has prepared a Schedule of Proposed Modifications (September 2021)3 to address the representations received during the Regulation 19 consultation and reflect revisions to relevant national policy and legislation as well as local plans and guidance documents published since January 2021. The Schedule of Proposed Main Modifications are being considered by representors and the Inspector during the Examination process, including any subsequent hearings sessions. The schedule proposes nearly 80 Main Modifications across the MWLP. Most notably for the HRA, the

https://www.herefordshire.gov.uk/downloads/file/22074/1-publication-draft-herefordshire-minerals-and-waste-local-plan-jan-2021-

¹ Herefordshire Council (2021) Herefordshire Minerals and Waste Local Plan Publication Draft [online]. Available at:

² LUC (2020) Habitats Regulations Assessment of the Publication Draft Herefordshire Minerals and Waste Local Plan [online]. Available

at: https://www.herefordshire.gov.uk/downloads/file/22089/24-habitat-regulations-assessment-2021-publication-draft-stage

³ Hendeca (2021) Herefordshire Minerals and Waste Local Plan – Schedule of Main Modifications and Minor Changes proposed pre-Examination

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proposed Main Modifications provided the clarity requested by Natural England (NE), Environment Agency (EA) and Natural Resources Wales (NRW), particularly relating to the need for mineral and waste proposals to demonstrate at least nutrient neutrality on the River Wye SAC.

1.2 The Publication Draft Herefordshire MWLP and its associated HRA Report, as well as the Schedule of Proposed Modifications and the 2021 HRA Addendum Report, were submitted for examination to the Secretary of State on 22 March 2022. On 9 May 2022, following an initial review of the Publication Draft Herefordshire MWLP, the Schedule of Proposed Modifications and associated HRA reports, the Planning Inspectorate requested that the 2021 HRA Addendum be reviewed and updated, stating:

"Natural England has recently updated the conservation status of the River Clun SAC and has provided updated advice together with a new generic methodology for assessing nutrient pollution. A review of the HRA is necessary to take into account this advice and update. In carrying out this review, you should obtain the views of Natural England as the appropriate nature conservation body and consider any available nutrient neutral mitigation proposals. This work is necessary to enable us to consider whether the Herefordshire Minerals and Waste Local Plan will result in a likely significant effect on the integrity of the European site".

- 1.3 The purpose of this updated HRA Addendum is to take into account the latest advice from Natural England and to consider whether the proposed Main Modifications are likely to have any new or different effects on European sites from those identified in the 2020 HRA of the Publication Draft MWLP and, if so, to carry out HRA of the proposed modifications. It should be noted that this is an addendum to the 2020 HRA Report an update to the 2021 HRA Addendum, and that these and that the these documents should therefore be read together.
- **1.4** Following the Examination hearings, the final set of agreed Main Modifications will also be assessed through a further HRA stage and reported either in an Updated HRA Report or a further update to this Addendum. That Updated HRA Report or Addendum will be published alongside the final Main Modifications for a formal consultation period.

This HRA Addendum includes the findings of the previous addendum on the proposed 'Main Modifications' to the Herefordshire MWLP and also provides an update in response to the comments received from the Planning Inspectorate in relation to updated advice from Natural England.

Additional 'Minor Changes' were proposed by Herefordshire Council to address non-substantive matters such as typographical, factual and grammatical errors. These Minor Modifications have not been subject to assessment as they do not have the potential to lead to likely significant effects on European sites.

Habitats Regulations Assessment

- 1.5 Herefordshire Council is required to undertake a Habitats Regulations Assessment (HRA) of the Herefordshire MWLP. The requirement to undertake HRA of development plans was confirmed by the amendments to the Habitats Regulations published for England and Wales in 2007⁴; the currently applicable version is the Habitats Regulations 2017⁵, as amended. When preparing its development plan, Herefordshire Council is therefore required by law to carry out an HRA. The Council can commission consultants to undertake HRA work on its behalf and this (the work documented in this report) is then reported to and considered by Herefordshire Council as the 'competent authority'. The Council will consider this work and would usually only progress a Plan if it considers that the Plan will not adversely affect the integrity of any 'European site', as defined below. The requirement for authorities to comply with the Habitats Regulations when preparing a Plan is also noted in the Government's online Planning Practice Guidance (PPG)6.
- 1.6 HRA refers to the assessment of the potential effects of a development plan on one or more sites afforded the highest level of protection in the UK: Special Protection Areas (SPAs) and Special Areas of Conservation (SACs). These were classified under European Union (EU) legislation but, since 1 January 2021, are protected in the UK by the Habitats Regulations 2017 (as amended). Although the EU Directives from which the UK's Habitats Regulations originally derived are no longer binding, the Regulations still make reference to the lists of habitats and species that the sites were designated for, which are listed in annexes to the EU Directives:

[online]. Available at:

https://www.legislation.gov.uk/ukdsi/2019/9780111176573.

⁶ Department for Levelling Up, Housing and Communities and Ministry of Housing, Communities and Local Government (2019) Appropriate assessment: Guidance on the use of Habitats Regulations Assessment [online]. Available at:

https://www.gov.uk/guidance/appropriate-assessment

⁴ HM Government (2007) The Conservation (Natural Habitats, &c.) (Amendment) Regulations 2007 (SI No. 2007/1843) [online]. Available at: https://www.legislation.gov.uk/uksi/2007/1843/contents

⁵ HM Government (2017) The Conservation of Habitats and Species Regulations 2017 (SI No. 2017/1012) [online]. Available at: https://www.legislation.gov.uk/uksi/2017/1012/contents/made, as amended by HM Government (2019) The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 (SI 2019/579)

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- SACs are designated for particular habitat types (specified in Annex 1 of the EU Habitats Directive⁷) and species (Annex II).
- SPAs are classified for rare and vulnerable birds (Annex I of the EU Birds Directive⁸), and for regularly occurring migratory species not listed in Annex I.
- **1.7** The term 'European sites' was previously commonly used in HRA to refer to 'Natura 2000' sites⁹ and Ramsar sites (international designated under the Ramsar Convention). However, a Government Policy Paper¹⁰ on changes to the Habitats Regulations 2017 post-Brexit states that:
 - Any references to Natura 2000 in the 2017 Regulations and in guidance now refers to the new 'national site network'.
 - The national site network includes existing SACs and SPAs; and new SACs and SPAs designated under these Regulations.
 - Designated Wetlands of International Importance (known as Ramsar sites) do not form part of the national site network. Many Ramsar sites overlap with SACs and SPAs and may be designated for the same or different species and habitats.
- 1.8 Although Ramsar sites do not form part of the new national site network, the Government Policy Paper confirms that all Ramsar sites remain protected in the same way as SACs and SPAs. In LUC's view and unless the Government provides any guidance to the contrary, potential effects on Ramsar sites should continue to form part of the HRA of plans and projects since the requirement for HRA of plans and projects that might adversely affect Ramsar sites forms an essential part of the protection confirmed by the Government Policy Paper. Furthermore, the NPPF¹¹ and practice guidance ¹² currently still state that competent authorities responsible for carrying out HRA should treat Ramsar sites in the same way as SACs and SPAs.

- 1.9 The requirement for HRA does not apply to other nationally designated wildlife sites such as Sites of Special Scientific Interest or National Nature Reserves; therefore, for clarity and consistency with the 2020 HRA Report, this addendum uses the term 'European sites' rather than 'national site network'.
- 1.10 The overall purpose of the HRA is to assess the potential for the MWLP to have adverse effects on the integrity of European designated nature conservation sites. This is judged in terms of the implications of the plan for a site's 'qualifying features' (i.e. those Annex I habitats, Annex II species, and Annex I bird populations for which it has been designated). Significantly, HRA is based on the precautionary principle. Where uncertainty or doubt remains, an adverse effect should be assumed.
- 1.11 The initial screening stage of the HRA considers whether the MWLP is likely to have significant effect on these sites either alone or in combination with other plans and projects. If likely significant effects cannot be ruled out at the screening stage, then an Appropriate Assessment (AA) must be carried out. Both these stages were undertaken and presented in the 2020 HRA Report for the Publication Draft MWLP.
- 1.12 The HRA should be undertaken by the 'competent authority' in this case Herefordshire Council, and LUC has been commissioned to do this on its behalf. The HRA also requires close working with Natural England as the statutory nature conservation body in order to obtain the necessary information and agree the process, outcomes and any mitigation proposals.

Stages of the HRA of the Herefordshire Minerals and Waste Local Plan

1.13 Table 1.1 summarises the stages of the Herefordshire MWLP preparation and the accompanying HRA Reports that have been prepared and consulted on. As previously explained, this is an update to the HRA Addendum prepared in 2021 and it should be read in conjunction with the 2020 HRA Report.

¹⁰ Department for Environment, Food and Rural Affairs (2021) Changes to the Habitats Regulations 2017 [online]. Available at: https://www.gov.uk/government/publications/changes-to-the-habitatsregulations-2017/changes-to-the-habitats-regulations-2017 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1005759/NPPF_July_2021.pdf

¹² David Tyldesley & Associates (undated) The HRA Handbook (Section A3) [online]. A subscription based online guidance document, available at: https://www.dtapublications.co.uk/handbook/European

⁷ Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora (the 'Habitats Directive').

⁸ Directive 2009/147/EC of 30 November 2009 on the conservation of wild birds (the 'Birds Directive').

⁹ European Commission (undated) Natura 2000 [online]. Available at: https://ec.europa.eu/environment/nature/natura2000/index_en.htm

Ministry of Housing, Communities and Local Government (2021) National Planning Policy Framework (paragraph 181) [pdf]. Available at:

Table 1.1: Herefordshire MWLP HRA stages and consultation documents

Local Plan Consultation Stage and Document	HRA Consultation Stage and Document
Scoping Stage	
Call for sites, evidence gathering, etc.	Drafting the HRA Scoping Report.
Issues and Options Stage	
<u>Issues & Options Paper</u> (August 2017) Consultation: 14 th August – 6 th October 2017	HRA Scoping Report for the Herefordshire Minerals and Waste Local Plan (August 2017)
	Consultation: 14 th August – 6 th October 2017
Draft Stage	
<u>Draft Herefordshire Minerals and Waste Local Plan</u> (January 2019)	HRA Report of the Draft Herefordshire Minerals and Waste Local Plan (December 2018)
Consultation: 21 st January – 4 th March 2019	Consultation: 21 st January – 4 th March 2019
Publication Draft Stage	
Publication Draft Herefordshire Minerals and Waste Local Plan (January 2021)	HRA Report on Draft Herefordshire Minerals and Waste Local Plan (December 2020)
Consultation: 12 th April – 24 th May 2021	Consultation: 12 th April – 24 th May 2021
Schedule of Main Modifications and Minor Changes Proposed Pre-Examination to the Herefordshire MWLP (September 2021) (not published for consultation)	HRA Addendum Report of the Schedule of Proposed Modifications (not published for consultation)
Submission to the Secretary of State	
The Publication Draft Herefordshire MWLP and its associated its associated HRA Addendum Report were submitted for exar	
Section 2 Examination	
Final Main Modifications to the Herefordshire Minerals and Waste Local Plan	An updated HRA report or additional addendum will be prepared setting out the likely significant effects of the final
Consultation: anticipated winter 2022	Main Modifications and published for consultation alongside the Main Modifications to the MWLP agreed during the Examination hearings.
Adoption	
Anticipated 2023	

Regulation 19 Representations on the Publication Draft MWLP and 2020 HRA Report

1.14 Natural England (NE), the Environment Agency (EA), and Natural Resources Wales (NRW) submitted representations to the Regulation 19 Publication Draft MWLP consultation, which expressed concerns regarding the HRA, stating that they are unable to agree a conclusion of no adverse effect on the integrity of the River Wye SAC, advising that further clarification is required of certain policies and

allocations. Some suggestions for amending the wording of the 2020 HRA report were made to help to clarify the proposed mitigation required in the MWLP.

1.15 A number of comments relate more to the wording of certain policies and allocations in the MWLP itself. These were discussed at a meeting between NE, Herefordshire Council, and their consultants preparing the MWLP (Hendeca) and the HRA consultants (LUC) in July 2021. Herefordshire Council and Hendeca have considered what proposed changes they

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could make to the relevant policies/site allocations and these were set out in the Schedule of Proposed Modifications.

- **1.16** LUC prepared a previous iteration of this HRA Addendum which considered the proposed Main Modifications and whether they changed the HRA conclusions previously identified in the 2020 HRA Report. The findings of this assessment are retained within this updated HRA Addendum (see **Chapter 3** and **Appendix A**).
- **1.17** The representations are presented in a table in **Appendix B** of this HRA Addendum, alongside LUC's response to each comment, and whether they have been addressed in the Council's Schedule of Proposed Modifications and/or the HRA Addendum.

Changes to Policy Context and Baseline Information

Policy Context

1.18 Since the preparation of the Publication Draft Herefordshire MWLP and its associated HRA, three notable documents were published or updated, of relevance to the Herefordshire MWLP and HRA:

Natural England's advice to Local Planning Authorities

1.19 On 16 March 2022, during the Examination process, Natural England issued advice to relevant LPAs, including Herefordshire Council, relating to plans and projects which have the potential to affect water quality resulting in adverse nutrient impacts on designated habitat sites [See reference]. It also provided an update to advice previously issued to Herefordshire Council on how to address the impacts of development which have the potential to increase nutrient emissions and adversely affect the integrity of the River Wye SAC (River Lugg component), for which Natural England and Herefordshire Council had agreed that nutrient neutrality would be applied as a mitigation measure. Natural England recommended that Herefordshire Council applies the updated nutrient neutrality methodology and the updated catchment calculator when assessing the nutrient impacts of the Herefordshire MWLP on the integrity of the River Lugg as part of the River Wye SAC. Natural England also advised Herefordshire Council that the conservation status of the River Clun SAC has been updated as being in unfavourable condition due to elevated nutrient levels (both phosphorus and nitrogen).

"Natural England advises you, as the Competent Authority under the Habitats Regulations, to carefully consider the nutrients impacts of any new plans and projects (including new development proposals) on habitats sites and whether those impacts may have an adverse effect on the integrity of a habitats site that requires mitigation, including through nutrient neutrality".

The River Lugg Catchment Position Statement

- **1.20** In April 2021, Herefordshire Council issued a Position Statement on the River Lugg Catchment 13 which confirmed that the River Wye SAC Nutrient Management Plan (NMP) is under review with the intention to provide an increased level of certainty around phosphate reduction and timescales. The Position Statement reports on the Interim Phosphate Delivery Plan developed in consultation with Natural England which sets out a number of potential mitigation solutions that could be used to remove phosphate from the environment in the River Wye SAC catchment.
- **1.21** The River Lugg Catchment Position Statement (April 2021) (under title 'In the Interim') reiterates previous advice that:

"On Natural England's advice, there remains potential for a positive appropriate assessment, where it can be demonstrated that development is nutrient neutral or would lead to betterment to enable development to proceed. Proposals will need to provide appropriate evidence of avoidance/mitigation measures. (Refer to Stage 2 of the Interim Plan for guidance)".

1.22 It is clear that the details around phosphate reduction and the protection of the River Wye SAC will change over the plan period; however, the fundamental aim remains to be that any new development with a connection to the River Wye SAC will need to demonstrate at least nutrient neutrality in order to gain planning permission. The proposed Main Modifications to the Herefordshire MWLP are in line with the advice from Natural England.

Natural Resources Wales' (NRW's) Planning Position Statement¹⁴

1.23 In January 2021, NRW published a Planning Position Statement regarding the phosphate levels from development in the riverine SAC catchments in Wales. It identifies that the

¹³ Herefordshire Council (2021) Position Statement – Development in the River Lugg Catchment Area April 2021 An Update [pdf]. Available at: https://www.herefordshire.gov.uk/downloads/file/22149/position-statement-update-april-2021

¹⁴ NRW (2021) Planning Position Statement [pdf]. Available at: <u>https://cdn.cyfoethnaturiol.cymru/media/693023/planning-position-statement-river-sac-compliance.pdf?mode=pad&rnd=132557132170000000</u>

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River Wye SAC fails in terms of achieving the phosphate standards and presents evidence of 'widespread or severe' phosphate levels (67%). In waterbodies which already fail to satisfy the phosphate standards set for a SAC, there is no headroom within these waterbodies to accommodate increased levels of phosphate and further increases in phosphate will further worsen the condition of the SAC. Therefore, any proposed development within the catchment or waterbody that might increase the amount of phosphate within the catchment or waterbody could lead to additional damaging effects to the SAC therefore such proposals should be screened through a HRA to determine whether they are likely to have a significant effect on the site's qualifying features.

Baseline Information

- **1.24** Since the preparation of the 2020 HRA Report, the following baseline information has been published that is relevant to the HRA of the proposed pre-examination Main Modifications:
 - Natural England updated the conservation status of the River Clun SAC as being in unfavourable condition due to elevated nutrient levels (both phosphorus and nitrogen).
- According to NRW's Compliance Assessment of Welsh River SACs against Phosphorous Targets¹⁵, the comparison of phosphorus concentrations in the River Wye SAC against NRW's phosphate targets indicates widespread failures, some of them large in magnitude. Fourteen waterbodies in the River Wye SAC passed their targets however, 28 failed and three were unknown. Both consistent and episodic failures were identified.

Structure of this HRA Addendum

- **1.25** This chapter has described the plan-making and HRA processes undertaken to date in preparing the Herefordshire MWLP. The rest of this HRA Addendum is structured as follows:
 - Chapter 2 sets out the approach taken in this HRA Addendum.
 - Chapter 3 summarises the relevant conclusions from the 2020 HRA Report and describes whether the proposed Main Modifications will change any of the previous HRA conclusions.
 - Chapter 4 updates the conclusions from the 2021 HRA Addendum addressing the proposed Main Modifications

and describes the next steps to be undertaken in the MWLP and HRA process.

- **1.26** This HRA Addendum is supported by the following appendices:
 - Appendix A reproduces the Schedule of Proposed Modifications, with commentary on the HRA implications of each proposed Main Modification.
 - Appendix B presents the Regulation 19 consultation comments received on the Publication Draft MWLP and the 2020 HRA Report and explains how they have been addressed through the proposed Main Modifications and/or the HRA Addendums.
 - Appendix C presents the advice letter issued by Natural England to Local Planning Authorities on 16 March 2022.

<u>assessment-of-welsh-sacs-against-phosphorus-targets-final-y10.pdf?mode=pad&rnd=132557227300000000</u>

¹⁵ NRW (2021) Compliance Assessment of Welsh River SACs against Phosphorous Targets [pdf]. Available at: https://cdn.cyfoethnaturiol.cymru/media/693025/compliance-

HRA Approach

This chapter describes the approach that has been taken to the HRA of the proposed Main Modifications to the Herefordshire MWLP.

Approach

2.1 The approach to assessing the HRA implications of the proposed pre-examination Main Modifications involved considering each proposed modification as set out in the Council's Schedule of Proposed Modifications (both Table 1, which covers the Main Modifications to policies in the MWLP and Table 2, which includes Main Modifications to the Key Development Criteria for site allocations within the MWLP). A column was added to Table 1 and 2 from the Schedule of Proposed Modifications to consider and record whether the proposed modification would change the HRA findings presented in the 2020 HRA Report for the relevant part of the Herefordshire MWLP that the modification relates to. The Schedule of Proposed Modifications tables with the additional 'HRA implications' column are presented in **Appendix A** of this HRA Addendum (see Table A.1 and Table A.2), and the findings are summarised in Chapter 3.

Addressing Regulation 19 Representations

2.2 As mentioned in the previous chapter, a number of the proposed Main Modifications have been made by the Council to address concerns raised by Natural England, the Environment Agency, and Natural Resources Wales in their Regulation 19 representation regarding the potential for the MWLP policies and site allocations to result in adverse effects on the integrity of European sites (in particular the River Wye SAC). A summary of each organisation's main concerns is provided below, with their detailed representations presented in **Appendix B**.

Natural England

- **2.3** Natural England's main concerns, outlined in their representation dated 24th May 2021, relate to the need for:
- Clarity regarding which part of the River Wye SAC catchment might be affected by policies and/or specific

HRA Approach

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- site allocations in the MWLP (in particular, the River Lugg part of the catchment as it is exceeding the targets for phosphate and causing the River Wye SAC to fail to meet its conservation objectives).
- Clarity regarding the use of the terms nutrient neutrality and 'betterment' within Policy W3 (Agricultural Waste Management), Policy W4 (Wastewater Management) and a number of the site allocations' Key Development Criteria.
- Clarity regarding references in the 2020 HRA Report to the River Wye SAC Nutrient Management Plan and reliance upon it to provide mitigation, and also ensuring the latest advice from Herefordshire Council is referred to (i.e. the Position Statement - Development in the River Lugg Catchment Area, April 2021¹⁶).
- One further comment relating to the potential for minerals workings at site M12 Callow Delve to have noise and light impacts on Wye Valley and Forest of Dean Bat Sites SAC horseshoe bats using the functionally linked habitat within that site.
- **2.4** These concerns were discussed at a meeting held in July 2021 between Herefordshire Council/Hendeca, LUC and Natural England, and proposed changes to the MWLP were agreed to be made.

Environment Agency

- **2.5** The Environment Agency's response, dated 24th May 2021, raised the following concerns/issues:
 - Clarity regarding how Policy W3 (Agricultural Waste Management) would be implemented and what would be accepted as "appropriately managed". Clarify that anaerobic digestion can take waste from other sources than just natural wastes.
 - Concerns that requiring development to demonstrate nutrient neutrality may not be possible for agricultural developments which cannot connect to the mains foul sewer.
 - Policy W6 (Preferred locations for construction, demolition and excavation waste management facilities) should seek certainty that there is sufficient capacity and options to achieve nutrient neutrality.

- Concerns about deferring to the planning application stage the requirement to demonstrate nutrient neutrality.
- Clarity regarding when and how nutrient neutrality could be achieved at wastewater management sites (Policy W4 [Wastewater Management].

Natural Resources Wales

- **2.6** Natural Resources Wales' main concerns, outlined in their response dated 24th May 2021, relate to:
 - Changes to the evidence base, specifically:
 - NRW's Planning Position Statement¹⁷, published in January 2021, which relates to the phosphate levels from development in the riverine SAC catchments, including the River Wye SAC.
 - NRW's Compliance Assessment of Welsh River SACs against Phosphorous Targets¹⁸.
 - Clarity regarding phosphorus recovery and the requirement of proposals to demonstrate nutrient neutrality within the River Wye SAC for mineral policies in the MWLP (not only for Policy W3 [Agricultural Waste Management] and W4 [Wastewater Management]).
 - Clarity regarding Ecological Mitigation Plans and sitespecific HRAs.
 - Concerns raised that discharges from mineral development, either alone or in combination, may have phosphate implications that affect the integrity of the River Wye SAC.
- 2.7 Herefordshire Council and Hendeca sought to address these concerns (and those of other representors raised through the Regulation 19 consultation) within the Council's Schedule of Proposed Modifications to the MWLP. The implications for the HRA conclusions presented in the 2020 HRA Report have been assessed (see **Appendix A**). A summary of the findings is provided in the next chapter. Where relevant, concerns raised by NE, NRW and EA have been addressed within this HRA Addendum (such as reference to updated evidence base), as explained in **Appendix B**.

statement-river-sac-

compliance.pdf?mode=pad&rnd=132557132170000000

¹⁸ NRW (2021) Compliance Assessment of Welsh River SACs against Phosphorous Targets [pdf]. Available at:

https://cdn.cyfoethnaturiol.cymru/media/693025/compliance-assessment-of-welsh-sacs-against-phosphorus-targets-final-v10.pdf?mode=pad&rnd=132557227300000000

¹⁶ Herefordshire Council (2021) Position Statement – Development in the River Lugg Catchment Area April 2021 An Update [pdf]. Available at: https://www.herefordshire.gov.uk/downloads/file/22149/position-statement-update-april-2021

¹⁷ NRW (2021) Planning Position Statement [pdf]. Available at: https://cdn.cyfoethnaturiol.cymru/media/693023/planning-position-

Chapter 2 HRA Approach

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Addressing Natural England's advice on nutrient neutrality

2.8 This HRA Addendum considers the nutrients impacts of the Herefordshire MWLP on the River Clun SAC and the River Lugg as part of the River Wye SAC and whether those impacts may have an adverse effect on the integrity of the habitats sites that require mitigation, including through nutrient neutrality. The implications for the HRA conclusions presented in the 2020 HRA Report are presented in Appendix A and a summary of the findings is provided in the next chapter.

Findings of the HRA of the Proposed Main Modifications

3.1 This chapter summarises the relevant conclusions of the 2020 HRA and assesses whether the proposed Main Modifications to the Herefordshire MWLP will change those HRA conclusions. It also reviews whether the changes, and mitigation and avoidance measures relied upon, ensure that the Herefordshire MWLP will meet the recent Natural England guidance on the requirement for nutrient neutrality in relation to the River Lugg component of the River Wye SAC and the River Clun SAC.

Summary of Previous HRA Conclusions

- **3.1** Following the Screening stage, the 2020 HRA for the Publication Draft MWLP identified the following potential Likely Significant Effects (LSE) which required further consideration at the Appropriate Assessment (AA) stage to determine whether they would result in Adverse Effects on Integrity (AEoI), either alone or in-combination with other plans and projects:
 - River Wye SAC physical damage and loss of habitat; non-physical disturbance; water quality and quantity, air pollution and non-toxic contamination.
- Wye Valley and Forest of Dean Bat Sites SAC physical damage and loss of offsite functionally linked habitat, in relation to proposed minerals allocation M12 Callow Delve.

Findings of the HRA of the Proposed Main Modifications

- Severn Estuary SAC, SPA and Ramsar site water quality and quantity.
- **3.2** The screening assessment identified a lack of certainty as to whether the following policies would result in LSE on European sites:
- M3: The winning and working of sand and gravel;
- M5: The winning and working of building stone (sandstone);
- W3: Agricultural waste management;
- W4: Waste water management;
- W5: Preferred locations for solid waste treatment facilities; and
- W6: Preferred locations for construction, demolition and excavation waste facilities.
- **3.3** The screening assessment identified a lack of certainty as to whether the following proposed site allocations would result in LSE on European sites:
 - M05 Wellington Quarry;
 - M12 Callow Delve;

- W05 Leominster;
- W13 Former Lugg Bridge Quarry;
- M20 Westonhill Wood Delve;
- W63 Southern Avenue, Leominster;
- W66 Moreton Business Park, Moreton-on-Lugg;
- Area of Search C; and
- W45 Wellington Quarry (waste use at site M05).
- **3.4** The AA stage considered the potential for the LSEs identified above to result in AEoIs on the River Wye SAC, Severn Estuary SAC, SPA and Ramsar and the Wye Valley and Forest of Dean Bat Sites SAC. The detailed findings, evidence relied upon and existing mitigation provided within the Herefordshire Local Plan Core Strategy, other policies in the MWLP and other documents (such as the River Wye SAC Nutrient Management Plan and Herefordshire Council's River Lugg Position Statement/FAQs/HRA guidance) were described in Chapter 5 of the 2020 HRA Report. Following the AA stage, recommendations were made for wording changes within parts of the MWLP as shown in **Table 3.1**.

Table 3.1: Recommendations for wording changes within parts of the MWLP

Reference Location	Recommendation
MWLP Appendix A: Key Development Criteria	Commitment to site specific HRA for the Wellington Quarry minerals and waste site allocations including requirement for detailed protected species surveys for otter to determine any site-specific mitigation and protection measures such as timing of works and disturbance buffers.
MWLP – Policy M3	Requirement for project-level/site specific HRA and targeted ecological survey for otter.
MWLP – Paragraph 5.4.10	Recommend inclusion of the following wording: "A management strategy associated with a minerals or waste development should, where appropriate, include an Ecological Mitigation Plan which specifies working methods, timings and buffers within the development site required to protect vulnerable ecological features, including European Sites. The mitigation plan will include appropriate disturbance buffers, with the size and shape of the buffer defined on a site-by-site basis and dependent on the attributes of the feature. Such Ecological Mitigation Plans will also be required for new sites coming forward in Area of Search C where there is potential for operations to affect the River Wye SAC."
MWLP – Section 5.7.6	It is recommended that the wording of this section of the Publication Draft MWLP is strengthened, in line with the suggested replacement wording for paragraph 5.7.6: "5.7.6: If not properly controlled at source, dust can cause nuisance to people and businesses, and harm through deposition on property and farmland. Dust can also cause adverse ecological impacts to sensitive sites."
MWLP – Section 5.7.7	It is recommended that the wording of this section of the Publication Draft MWLP is strengthened, in line with the suggested replacement wording for paragraph 5.7.7: "5.7.7: A dust assessment will be required where fugitive dust emissions are likely to cause a nuisance or adverse ecological impact; atmospheric dispersion modelling may be required to determine whether there is a risk of health effects due to dust emissions. A separate dust assessment is not required where dust is addressed within an air quality assessment and/or health impact assessment as appropriate."

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3.5 The 2020 HRA Report then made the following conclusions:

River Wye SAC

- Habitat loss/damage and non-physical disturbance: providing the additional recommendations are included and implemented (see table above re: Key Development criteria for Wellington Quarry, Policy M3 and paragraph 5.4.10), the Publication Draft MWLP will not give rise to adverse effects on the integrity of the River Wye SAC, either alone or in-combination with other plans or projects as a result of habitat loss and damage or through non-physical disturbance.
- Air pollution: in light of the existing safeguards provided (i.e. the need for anaerobic digestion or energy from waste facilities to obtain an Environmental Permit (EP), as regulated by the Environment Agency), the Publication Draft MWLP will not give rise to adverse effects on the integrity of the River Wye SAC, either alone or in-combination with other plans or projects as a result of air pollution associated with anaerobic digestion or energy from waste facilities.
- Non-toxic contamination: providing the additional recommendations are included and implemented (see table above re: Sections 5.5.6 and 5.5.7), the Publication Draft MWLP will not give rise to adverse effects on the integrity of the River Wye SAC, either alone or incombination with other plans or projects as a result of non-toxic contamination.

River Wye SAC/Severn Estuary SAC, SPA and Ramsar

Changes in water quality: in light of the existing safeguards provided (paragraph 5.4.5, requirement for developments to achieve nutrient neutrality or betterment in relation to phosphate levels in the River Wye SAC included in Policies W3, W4 and Key Development Criteria for relevant minerals and waste site allocations), the Publication Draft MWLP will not give rise to adverse effects on the integrity of the River Wye SAC and Severn Estuary SPA, Ramsar and SPA, either alone or in-combination with other plans or projects as a result of changes in water quality or quantity.

Wye Valley and Forest of Dean Bat Sites SAC

Physical damage and loss of offsite functionally linked habitat: the safeguards already included in the Publication Draft MWLP (Appendix A (Allocated Sites and the Key Development Criteria) includes specific avoidance and mitigation safeguards for Callow Delve) will ensure that adverse effects on the integrity of the Wye Valley and Forest of Dean Bat Sites SAC, as a

- result of damage and loss of off-site habitat, will be avoided, either alone or in-combination.
- **3.6** The overall conclusion of the 2020 HRA Report was:

Providing the existing mitigation measures provided by the Local Plan-Core Strategy policies and MWLP supporting text and Key Development Criteria are successfully implemented, along with the inclusion and implementation of the additional recommendations listed above, the Publication Draft MWLP will not give rise to adverse effects on the integrity of European sites, either alone or in-combination with other plans or projects.

Assessment of Proposed Main Modifications

- **3.7** As shown in **Appendix A**, the proposed Main Modifications do not alter the 2020 HRA conclusions, as no site allocations have been changed, and the proposed amendments to MWLP policies, supporting text and Key Development Criteria have strengthened the mitigation requirements that will help to avoid adverse effects on integrity.
- 3.8 In particular, the proposed Main Modifications have provided the clarity requested by NE, EA and NRW within Policies W3 and W4 and the Key Development Criteria for those site allocations within the catchment of the River Wye SAC (including the River Lugg catchment) that waste or minerals development proposals need to demonstrate at least nutrient neutrality before they can be permitted. This mitigation requirement provides more certainty that the MWLP will not lead to increases in phosphate levels in the River Wye SAC and therefore strengthens the conclusion of the 2020 HRA Report that the MWLP will not have an adverse effect on integrity of the River Wye SAC in relation to changes in water quality, either alone or in combination.
- **3.9** The issue raised by NE in relation to the potential for minerals workings at site M12 Callow Delve to have noise and light impacts on Wye Valley and Forest of Dean Bat Sites SAC horseshoe bats using the functionally linked habitat within that site has been addressed by the updated AA section set out at **paragraph 3.13** below.

River Clun SAC

3.10 Since the 2021 HRA Addendum, Natural England updated the conservation status of the River Clun SAC as being in unfavourable condition due to elevated nutrient levels (both phosphorus and nitrogen). As requested by the Planning Inspectorate, this HRA Addendum has been reviewed and updated to assess LSE on the integrity of the River Clun SAC. It is concluded that, through an absence of impact pathways,

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there will be no LSE on the River Clun SAC from the Herefordshire MWLP.

Updates to 2020 HRA Report

AA section on Water Quality and Quantity

- **3.11** As part of addressing some of the concerns raised by NE and NRW, the following section presents an extract of paragraphs 5.19 to 5.33 of the 2020 HRA Report (which cover the AA undertaken in relation to changes in water quality and quantity effects on the River Wye SAC and Severn Estuary SAC, SPA and Ramsar). The paragraphs have been updated as relevant to reflect the MWLP wording as proposed to be modified through the proposed Main Modifications, and updates to baseline information/guidance documents.
- **3.12** Where text has been deleted, this is shown in strikethrough text, and additional text is shown in underlined text.

Extract of Paragraphs 5.19 to 5.33 of the 2020 HRA Report Updated to Reflect the proposed Main Modifications to the MWLP

Water quality and quantity (River Wye SAC and Severn Estuary SPA, Ramsar and SAC)

- 5.19 As specified in the initial screening assumptions, there is potential for the Publication Draft MWLP to result in impacts to the River Wye SAC and downstream Severn Estuary SPA, Ramsar and SAC through changes in water quality and quantity. For water quality, this relates to potential sediment discharge and surface water run off that may be associated with minerals and waste sites. The Screening Assessment concluded that Likely Significant Effects are uncertain in relation to the following policies (and some of the associated site allocations) in the Publication Draft MWLP:
- Mineral policy M3: The winning and working of sand and gravel (and in particular site allocation M05 Wellington Quarry);
- Mineral policy M5: Winning and working of sandstone (in particular at consented sites M12 Callow Delve and M20 Westonhill Wood Delve);
- Waste policy W3: Agricultural waste management;
- Waste policy W4: Wastewater management;
- Waste policy W5: Preferred locations for solid waste treatment facilities (in particular, site allocations W05 Leominster HWRC, W63 Southern Ave, Leominster and W66 Moreton Business Park, Moreton-on-Lugg); and

- Waste policy W6: Preferred locations for construction, demolition and excavation waste facilities (and in particular site allocation W45 Wellington Quarry and W13 Former Lugg Bridge Quarry).
- 5.20 The Preparing the Publication Draft MWLP document provides a very useful description of the types of minerals and waste activities that could result in water pollution to the River Wye SAC and concludes it is actually only increases in phosphate discharges that are the real concern. This is important as it the SAC is not meeting its conservation objectives to maintain favourable status due mainly to exceedance of phosphate targets in the River Lugg part of the River Wye SAC. Therefore, while there may be some occasional release of other pollutants through surface water run-off at minerals and waste sites (e.g. oil or fuels from machinery and vehicles), the types of pollutants are less likely than phosphate to significantly affect water quality in the River Wye SAC.
- 5.21 There is an existing A Nutrient Management Plan (NMP) for the River Wye SAC was prepared in 2014, which sought to identify actions that would enable additional development in the Local Plan-Core Strategy (beyond existing wastewater discharge consents) to proceed. However, due to the phosphate targets still being exceeded, and the implications of the Dutch Nitrogen case (that there must be certainty that mitigation and avoidance measures will actually be achieved), the NMP has been superseded by new documents published by the Council in March 2020 April 2021 (Position Statement and FAQs on Development in the River Lugg Catchment Area, as well as FAQs and a Guidance Note and Checklist relating to HRA and planning applications (dated March 2020)). These mostly focus on applications for residential or commercial development that will result in overnight stays, as the River Wye SAC NMP identified that 'point source discharges, such as industrial and wastewater treatment works (WwTW) discharges are responsible for a large portion of the phosphate loading to the rivers. The main diffuse source of phosphate is thought to be from agricultural sources via land run off'.
- 5.22 Mineral working proposals would not normally be considered as a source of phosphate, as they do not generate wastewater from residential occupancy and there is no mining of phosphate rock in Herefordshire (see also 'Avoidance and Mitigation' section below). Therefore, while the above policies and site allocations could result in some discharges/run-off to the River Wye and River Lugg, these are unlikely to adversely affect the integrity of the SAC because any discharges or run-off will not be high in phosphates. However, the Preparing the Publication Draft MWLP document recognises that mineral working can result in a change in agricultural land, throughout the extraction process: stripping away

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topsoil and subsoil; extracting the mineral; and restoration. Restoration proposals involving schemes that would draw in a lot of visitors to the area could also result in phosphate releases (from wastewater). Restoration to agriculture could also result in phosphate releases, if too much of the nutrient is added to the land.

- 5.23 Solid waste proposals would not normally be considered as a source of phosphate. The Preparing the Publication Draft MWLP document however refers to research¹⁹ from 2011 that indicates that phosphate may be released from some waste management processes: municipal solid wastes and clinical and hazardous wastes going through thermal processes and disposal to landfill. The MWLP does not promote the landfill of municipal solid waste, clinical or hazardous wastes within Herefordshire; no suitable locations have been identified. The MWLP does promote the use of thermal processes to recover energy from residual wastes. However, further research in 2016²⁰ does not identify phosphate as a main air-borne emission from energy from waste facilities. Instead, the phosphate (as phosphorus) is captured in the fly ash, the residue resulting from air pollution control measures within the facility. The thermal treatment of wastes is consequently not of itself a likely phosphate source, either from waste treatment processes or from the disposal of fly ash.
- 5.24 For water quantity, there is potential for dredging, dewatering and excavation below the water table in relation to the sand and gravel extraction proposed through site allocation M05 and for water usage that could impact on the water table in relation to the W45 inert waste allocation. The Screening Assessment therefore concluded that Likely Significant Effects are uncertain in relation to water quantity for these two allocations.

Avoidance and Mitigation

5.25 The risks of phosphate discharges relating to stripping away topsoil and subsoil; extracting the mineral; and restoration can be avoided by the use of conditions requiring development proposals to demonstrate how 'nutrient neutrality' (i.e. a project would result in no net increase in the phosphate load being discharged to the River Wye SAC; this could be after controls at source, reduction by treatment, and/or offsetting measures), or 'betterment' (i.e. an improvement in the current situation regarding phosphate impacts, above and beyond neutrality) would be achieved.

5.26 The requirement for developments to achieve nutrient neutrality or betterment in relation to the River Wye SAC has been added clarified through the proposed Main Modifications to policy W3, W4 and their supporting text, as well as to the Publication Draft MWLP within the Key Development Criteria for all three sand and gravel allocations in policy M3, Perton Quarry in policy M4, Callow Delve and Westonhill Wood Delves in policy M5, all but one of the waste allocations in policy W5 (2) (Land between Little Marcle Road and Ross Road), all of the waste allocations in policy W5 (3) except Ledbury Household Waste Recycling Centre and all of the allocations in policy W6.

5.27 In addition, the supporting text within Chapter 5 of the MWLP explains how Core Strategy policies SS6; LD1; LD2; LD3; and LD4 relating to Environmental Quality and Local Distinctiveness should be applied to minerals and waste development proposals. Paragraph 5.4.5 states that:

"All applications will be expected to incorporate robust measures to ensure that the proposed development does not cause an unacceptable adverse impact on either the environment or local communities, many of which can be overcome by implementing standard measures".

- 5.28 This includes general measures to mitigate water pollution such as cleaning of lorry wheels before they exit the site and good maintenance of bunds and stockpiles, as well as locating plant, machinery and haulage routes away from sensitive receptors. This measure should help to avoid water pollution impacts relating to surface water run-off and sediment discharge.
- 5.29 In relation to agricultural waste management, policy W3 <u>as proposed to be amended through MM7.j</u> now would states "all development proposals will be required to demonstrate delivery of a net reduction in nutrient discharges contributing to nutrient neutrality, or betterment, within the River Wye SAC". It is understood that agricultural planning applicants would need to demonstrate nutrient neutrality through their own calculations (i.e. not those contained in the River Lugg Position Statement).
- 5.30 In addition, policy W4 has been updated <a href="https://www.hrough.com/

http://sciencesearch.defra.gov.uk/Default.aspx?Menu=Menu&Module =More&Location=None&Completed=0&ProjectID=15234

¹⁹ Department for Environment, Food and Rural Affairs (2011) Emissions from Waste Management Facilities: Frameworks for Assessment of Data Quality and Research Needs – WR0608 [online].
Available at:

²⁰ Department for Environment, Food and Rural Affairs (2016) Assessment of particulate emissions from energy-from-waste plant [pdf]. Available at: https://uk-

<u>air.defra.gov.uk/assets/documents/reports/cat07/1511261133_AQ072_6_PM_EfW_emissions_report_lssue2_with_appendices.pdf</u>

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Wherever practical and economical, biogas should be recovered for use as an energy source and phosphorus should be recovered for beneficial uses. The supporting text has been updated to reflects the location specific intentions for wastewater infrastructure operated by Dwr Cymru/Welsh Water.

- 5.31 Finally, policy W7 has been updated to includes encouragement for the recovery of phosphorus from the resultant fly ash, to be put to beneficial purposes.
- 5.32 In terms of water quantity, abstraction on the River Wye SAC is managed by the Environment Agency and Natural Resources Wales through established consented abstraction licensing, which aims to protect and enhance the Wye whilst permitting sustainable water use. It is likely that through this mechanism any potential impacts to water quantity to the River Wye SAC and downstream Severn Estuary SAC, Ramsar and SPA would be avoided.
- 5.33 Through the measures detailed above, safeguards provided within the MWLP would be sufficient to avoid adverse effects on the integrity of the River Wye SAC and Severn Estuary SAC, SPA and Ramsar, as a result of changes to water quality or quantity, and there is therefore no opportunity for effects to combine and affect the same receptor at the same time. As a result, there is no mechanism by which adverse effects on integrity could occur in-combination.

Conclusion

Providing that the avoidance and mitigation safeguards outlined above are implemented successfully, adverse effects on the integrity of the River Wye SAC and downstream Severn Estuary SPA, Ramsar and SAC, as a result of changes in water quality and quantity, will be avoided, either alone or in-combination.

AA section on Wye Valley and Forest of Dean Bat Sites SAC

3.13 As part of addressing some of the concerns raised by NE, the following section presents an additional section of appropriate assessment to cover the potential for non-physical disturbance of qualifying bat species using functionally linked habitat within the Callow Delve mineral site allocation. This potential likely significant effect was omitted from the HRA Screening Assessment in Chapter 4 of the 2020 HRA Report in error. Therefore, the following section should have been included following paragraph 5.50 of the 2020 HRA Report.

Non-physical disturbance to bats using functionally linked habitats

5.50 Proposed minerals allocation M12 Callow Delve in the Publication Draft MWLP was identified as having the

- potential to provide offsite but functionally linked habitat for the horseshoe bats associated with the Wye Valley and Forest of Dean Bat Sites SAC.
- 5.51 Indeed, woodland habitats within and adjacent to the site allocation may support foraging and commuting areas whilst buildings within the site may provide opportunities for roosting outside of the SAC, but which contributes to the integrity of the SAC population.
- 5.52 Minerals working at this site has the potential to result in a likely significant effect on the horseshoe bats foraging, commuting and/or roosting within the minerals site as a result of disturbance from noise, vibrations and light spill. However, it is understood that the current mineral operation is small and generally does not occur at night, therefore the actual likelihood of these disturbance impacts on the qualifying bats is limited.
- 5.53 Therefore, the potential for effects which could adversely affect the integrity of the SAC are considered unlikely and therefore consideration of this impact is considered highly precautionary in line with HRA best practice.

Avoidance and Mitigation

5.54 It is recommended that Appendix A of the Publication Draft MWLP (Allocated Sites and the Key Development Criteria) adds the following requirement for Callow Delve (see bold text):

"An AA is required to demonstrate the likely significant effects on [note this should read 'the adverse effects on integrity of'] the SAC. Need to demonstrate how habitat severance for horseshoe bats will be prevented, which may require the periphery woodland to be retained.

Need to demonstrate how noise and light impacts on horseshoe bats will be avoided".

5.54 Through the measures detailed above, safeguards provided within the MWLP would be sufficient to avoid adverse effects on the integrity of the Wye Valley and Forest of Dean Bat Sites SAC, as a result of non-physical disturbance to horseshoe bats using functionally linked habitat within the Callow Delve site allocation and there is therefore no opportunity for effects to combine and affect the same receptor at the same time. As a result, there is no mechanism by which adverse effects on integrity could occur in-combination.

Conclusion

It would be prudent to include the above additional recommended mitigation measure within the MWLP, so as to avoid, either alone or in-combination, adverse effects on the integrity of the Wye Valley and Forest of Dean Bat Sites SAC, as a result of non-physical disturbance to qualifying species using functionally linked habitat.

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Final HRA recommendation

3.14 Given the above additional section of the AA that is added to the 2020 HRA Report, there is a final recommendation for the Key Development Criteria for the Callow Delve minerals allocation.

The Schedule of Proposed Modifications does not include the recommended additional mitigation measure regarding noise and light impacts on horseshoe bats in the Key Development Criteria for Callow Delve. This could be done in the final Schedule of Main Modifications prepared in agreement with the Inspector following the Examination hearings.

Conclusions and Next Steps

This chapter presents the overall conclusions of the HRA of the proposed Main Modifications and describes the next steps to enable adoption of the Herefordshire MWLP.

Conclusion

- **4.1** The proposed Main Modifications do not alter the 2020 HRA conclusions or those of the 2021 HRA Addendum, as no site allocations have been changed, and the proposed amendments to MWLP policies, supporting text and Key Development Criteria have strengthened the mitigation requirements that will help to avoid adverse effects on integrity.
- **4.2** The existing safeguards provided (see Chapter 3) will ensure that the MWLP meets the requirement for developments to achieve nutrient neutrality or betterment in relation to phosphate levels in the River Wye SAC through the safeguards included in Policies W3, W4 and Key Development Criteria for relevant minerals and waste site allocations). They also ensure that the MWLP will not give rise to adverse effects on the integrity of the Severn Estuary SPA, Ramsar and SPA, either alone or in-combination with other plans or projects as a result of changes in water quality.
- **4.3** In particular, the proposed Main Modifications have provided the clarity requested by NE, EA and NRW within Policies W3 and W4 and the Key Development Criteria for those site allocations within the catchment of the River Wye SAC (including the River Lugg catchment) that waste or minerals development proposals need to demonstrate at least nutrient neutrality before they can be permitted. This ensures that the MWLP will meet the requirements set out by Natural England in its most recent advice letter, and for which the Planning Inspectorate requested an update review of the HRA findings. This mitigation requirement provides certainty that the MWLP will not lead to increases in phosphate levels in the River Wye SAC and therefore strengthens the conclusion of the 2020 HRA Report that the MWLP will not have an adverse effect on integrity of the River Wye SAC in relation to changes in water quality, either alone or in combination.

Conclusions and Next Steps

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- **4.4** This HRA Addendum also confirms that the MWLP will not, through an absence of impact pathways, result in likely significant effects on the River Clun SAC in relation to nutrient inputs, and satisfies the request from the Planning Inspectorate to review the previous HRA findings following the publication of further advice from Natural England.
- **4.5** The omission in the 2020 HRA Screening Assessment of the potential likely significant effect for minerals workings at site M12 Callow Delve to have noise and light impacts on Wye Valley and Forest of Dean Bat Sites SAC horseshoe bats using the functionally linked habitat within that site has been addressed by the updated AA section set out at paragraph 3.13.
- **4.6** However, as concluded in the 2021 HRA Addendum it is prudent that the additional mitigation measure below is added to the Key Development Criteria for Callow Delve. This could be done in the final Schedule of Main Modifications prepared in agreement with the Inspector following the Examination hearings.

It is recommended that Appendix A of the Publication Draft MWLP (Allocated Sites and the Key Development Criteria) adds the following requirement for Callow Delve (see bold underlined text):

"An AA is required to demonstrate the likely significant effects on [note this should read 'the adverse effects on integrity of'] the SAC. Need to demonstrate how habitat severance for horseshoe bats will be prevented, which may require the periphery woodland to be retained. Need to demonstrate how noise and light impacts on horseshoe bats will be avoided".

Next steps

- **4.7** In LUC's professional judgement, the work carried out and presented in this HRA Addendum is appropriate to meet the requirements of the Habitats Regulations in relation to the proposed Main Modifications to the Herefordshire MWLP.
- 4.8 This HRA Addendum will be provided to the Planning Inspectors as an Examination document. As part of the Examination, the Inspector will consider the proposed Main Modifications and seek views during the Examination hearings. Following the hearings, the Council will prepare a final Schedule of Main Modifications, which will be published for a formal consultation stage. The full HRA Report will be updated at that stage to reflect the final Schedule of Main Modifications and to determine whether the MWLP as proposed to be modified will have an adverse effect on the integrity of any European site.
- **4.9** Following the formal Main Modifications consultation that will happen after the Examination hearings, the Inspector will

consider the representations made and recommend any final changes necessary to make the MWLP meet the tests of soundness. If the Herefordshire MWLP is found to be 'sound', it can be formally adopted by Herefordshire Council.

LUC

June 2022

Appendix A

Schedule of Proposed Modifications – HRA Implications

Schedule of Proposed Main Modifications – HRA Implications

Table A.1: Schedule of Proposed Modifications and Implications for the HRA

Mod. Ref.	Paragraph/Policy/ Figure Reference	Proposed Modification	Reason for Change	Does the Proposed Main Modification Affect the HRA Conclusions Previously Reported in the Publication Draft HRA Report?
Section 4:	Vision, Objectives an	d Spatial Strategy		
MM4.a	Vision	Over the period to 2041, Herefordshire will deliver sustainable provision of minerals supply and waste management, balancing development needs whilst supporting the county's communities, protecting conserving and enhancing environmental, heritage and cultural assets and strengthening the local economy.	To bring text up to date and provide a more forward looking approach.	No change to HRA findings: The Vision was not previously found to have a likely significant effect on European sites as it does not directly result in development. This proposed Main Modification will not alter the Screening conclusions as it will also not result in a likely significant effect on European sites.
Table 1 M	WLP Objectives			
MM4.b	Objective 2	To prioritise the long-term conservation of primary minerals through enabling provision of sustainable alternatives, effective use of mineral reserves resources, and promoting efficient use of minerals in new development.	To replace text with the correct terminology and to ensure the principle is applied more widely than just permitted reserves.	No change to HRA findings: The MWLP Objectives were not previously found to have a likely significant effect on European sites as they do not directly result in development. This proposed Main Modification will not alter the Screening conclusions as it will also not result in a likely significant effect on European sites.
MM4.c	Objective 3 (new)	To safeguard appropriate mineral and waste resources, and associated transport infrastructure, within Herefordshire.	To replace the missing objective.	No change to HRA findings: The MWLP Objectives were not previously found to have a likely significant effect on European sites as they do not directly result in development. This proposed Main Modification will not alter the Screening conclusions as it will also not result in a likely significant effect on European sites.
MM4.d	Objective 11	To address the causes and impacts of climate change relating to minerals and waste development activity, including using opportunities arising from minerals and waste operations and reclamation activity to <u>decarbonise</u> , to mitigate and adapt to climate change and to leave a positive legacy.	To incorporate a request made in representation and to explicitly recognise the objective to achieve decarbonisation.	No change to HRA findings: The MWLP Objectives were not previously found to have a likely significant effect on European sites as they do not directly result in development. This proposed Main Modification will not alter the Screening conclusions as it will also not result in a likely significant effect on European sites.

Mod. Ref.	Paragraph/Policy/ Figure Reference	Proposed Modification	Reason for Change	Does the Proposed Main Modification Affect the HRA Conclusions Previously Reported in the Publication Draft HRA Report?
Section 5	Strategic Policy and 0	General Principles		
MM5.a	5.1.8 (new)	Each of the site allocations made in policy of the MWLP is accompanied by key development criteria. To avoid repetition and for clarity in the MWLP, these criteria are provided in the Site Allocation appendix and set out at section 9 of the MWLP; however, they are referenced within and form a part of each policy within which they are referenced.	To address comment raised in representation and to clarify the policy status of the key development criteria.	No change to HRA findings: Proposed Main Modification MM5.a clarifies the policy status of the key development criteria which have been assessed individually in the HRA (see Table A.2 below).
MM5.b	5.3.1 (new sentence)	In addition, the railheads at Moreton-on-Lugg (operational) and at Moreton Business Park (not-operational) provide the opportunity to increase non-road based transport.	To address comment raised in representation that railheads in Herefordshire were not appropriately recognised.	No change to HRA findings: Proposed Main Modification MM5.b provides clarification only, would not result in development and does not give rise to a likely significant effect on European sites.
MM5.c	Policy SP1 (new text at start of policy)	Development proposals will be supported where they adopt sustainable design principles, construction methods and procurement policies. This includes using the minimal amount of primary materials, reusing or facilitating the recycling of wastes and materials generated on site and using alternative construction materials sourced from secondary and recycled aggregates.	To ensure the policy is explicit about the intended outcome.	No change to HRA findings: Policy SP1 would not result in development because it sets out criteria relating to development and seeks to protect the natural environment. Proposed Main Modification MM5.c does not alter the intention of SP1 and would not have a likely significant effect on European sites.
MM5.d	Policy SP1/2	requiring all applicants to submit submission of a Resource Audit that identifies the quantum required and approach to sourcing construction materials, the amount and type of waste that is expected to be produced by the development and end of life considerations for the development materials.	To ensure the policy is explicit about who is expected to submit the Resource Audit.	No change to HRA findings: Proposed Main Modification MM5.d provides clarification only, would not result in development and does not give rise to a likely significant effect on European sites.
MM5.e	5.5.14	New development requires significant volumes of construction materials, and the facilities provided on site can affect how it performs the sustainability of that development through its operational lifetime.	To improve clarity in the text.	No change to HRA findings: Proposed Main Modification MM5.e provides clarification only, would not result in development and does not give rise to a likely significant effect on European sites.

Mod. Ref.	Paragraph/Policy/ Figure Reference	Proposed Modification	Reason for Change	Does the Proposed Main Modification Affect the HRA Conclusions Previously Reported in the Publication Draft HRA Report?
MM5.f	Policy SP2/1	Planning permission will be granted supported for mineral development proposals that optimise opportunities to improve public access to open spaces, integrating historic context and green infrastructure as appropriate.	To make the policy text consistent throughout the MWLP.	No change to HRA findings: Proposed Main Modification MM5.f provides clarification only. SP2 would still not result in development because it sets out criteria relating to development and does not give rise to a likely significant effect on European sites.
MM5.g	Policy SP3	Planning permission will be granted supported for minerals or waste development where it is demonstrated that the arrangements for the transport of mineral, waste or other materials	To make the policy text consistent throughout the MWLP.	No change to HRA findings: Proposed Main Modification MM5.g provides clarification only. SP3 would still not result in development because it sets out criteria relating to development and does not give rise to a likely significant effect on European sites.
MM5.h	5.11.9	As a starting point, developers should refer to the particular issues identified in the key development criteria (section 9) established for the each allocated sites and the Green Infrastructure Strategy already in place.	To ensure that the KDC are recognised as an element of policy under which each site is allocated.	No change to HRA findings: Proposed Main Modification MM5.h provides clarification only, would not result in development and does not give rise to a likely significant effect on European sites.
Section 6:	Minerals			
MM6.a	Policy M2/1a	the development would not sterilise or prejudice the future extraction of the mineral resource because it can be demonstrated that the resource: is not of economic value; occurs at depth and can be extracted in an economically viable alternative way; does not exist; or has been sufficiently depleted by previous extraction; or	To reflect request made in representation and to explicitly recognise that mineral extraction needs to be economically viable, and to correct the grammar.	No change to HRA findings: Proposed Main Modification MM6.a provides clarification only. Policy M2 would still not result in development because it sets out criteria relating to development and MM6.a would not give rise to a likely significant effect on European sites.
MM6.b	Policy M2/2	Where the operation of an existing mineral working, including associated infrastructure, could have a significant adverse effect on new development (including changes of use) in its vicinity, the applicant shall be required to provide suitable mitigation before the new development is completed.	To ensure the policy is explicit that the agent of change principle applies to infrastructure as well as working.	No change to HRA findings: Proposed Main Modification MM6.b provides clarification and strengthens the mitigation requirement. Policy M2 would still not result in development because it sets out criteria relating to development and MM6.b would not give rise to a likely significant effect on European sites.

Mod. Ref.	Paragraph/Policy/ Figure Reference	Proposed Modification	Reason for Change	Does the Proposed Main Modification Affect the HRA Conclusions Previously Reported in the Publication Draft HRA Report?
MM6.c	6.2.3	To this end, policy M3 has been drafted on the assumption that reserve in Herefordshire supplies 100% of the forecast sand and gravel demand.	To clarify this position.	No change to HRA findings: The proposed Main Modification clarifies that reserves in Herefordshire supply 100% of the forecast sand and gravel demand. This does not change the previously identified likely significant effect for Policy M3.
MM6.d	6.2.9	In addition to As part of this policy framework, the allocated sites are accompanied by key development criteria that present particular issues to be comprehensively addressed in association with any development proposal.	To ensure that the KDC are recognised as an element of policy under which each site is allocated.	No change to HRA findings: Proposed Main Modification MM6.d provides clarification only, would not result in development and does not give rise to a likely significant effect on European sites.
MM6.e	Policy M3/2a	Specific Sites (presented in alphabetical order) subject to the key development criteria set out at section 9:	To ensure that the KDC are recognised as an element of policy under which each site is allocated.	No change to HRA findings: Proposed Main Modification MM6.e provides clarification only, would not result in development and does not give rise to a likely significant effect on European sites.
MM6.f	Policy M3/3	Only where it is demonstrated to be necessary to maintain an adequate landbank or there is a shortfall in production capacity available at the Specific Sites or Preferred Areas of Search, will sand and gravel extraction will be supported in any other area of reserve resource.	To replace text with the correct terminology.	No change to HRA findings: Proposed Main Modification MM6.f provides clarification only, would not result in development and does not give rise to a likely significant effect on European sites.
MM6.g	6.2.12	To this end, policy M4 has been drafted on the assumption that reserve in Herefordshire supplies 100% of the forecast crushed rock demand.	To clarify this position.	No change to HRA findings: The proposed Main Modification clarifies that reserves in Herefordshire supply 100% of the forecast crushed rock demand. This does not alter the previous findings of no likely significant effect for Policy M4.
MM6.h	6.2.18	In addition to As part of this policy framework, the allocated sites are accompanied by key development criteria that present particular issues to be comprehensively addressed in association with any development proposal.	To ensure that the KDC are recognised as an element of policy under which each site is allocated.	No change to HRA findings: Proposed Main Modification MM6.h provides clarification only, would not result in development and does not give rise to a likely significant effect on European sites.

Mod. Ref.	Paragraph/Policy/ Figure Reference	Proposed Modification	Reason for Change	Does the Proposed Main Modification Affect the HRA Conclusions Previously Reported in the Publication Draft HRA Report?
MM6.j	Policy M4/2a	Specific Sites (presented in alphabetical order) subject to the key development criteria set out at section 9:	To ensure that the KDC are recognised as an element of policy under which each site is allocated.	No change to HRA findings: Proposed Main Modification MM6.j provides clarification only, would not result in development and does not give rise to a likely significant effect on European sites.
MM6.k	Policy M4/3	Only where it is demonstrated to be necessary in order to maintain an adequate landbank or there is a shortfall in production capacity available at the Specific Sites or Preferred Areas of Search, will limestone extraction be supported in any other area of reserve resource.	To replace text with the correct terminology.	No change to HRA findings: The minor wording change does not alter the previously identified HRA conclusions.
MM6.m	6.3.6	In addition to As part of this policy framework, the allocated sites are accompanied by key development criteria that present particular issues to be comprehensively addressed in association with any development proposal.	To ensure that the KDC are recognised as an element of policy under which each site is allocated.	No change to HRA findings: Proposed Main Modification MM6.m provides clarification only, would not result in development and does not give rise to a likely significant effect on European sites.
MM6.n	Policy M5/1b	the lateral extension and/or deepening of workings at the following consented sandstone extraction sites, subject to the key development criteria set out at section 9:	To ensure that the KDC are recognised as an element of policy under which each site is allocated.	No change to HRA findings: Proposed Main Modification MM6.n provides clarification only, would not result in development and does not give rise to a likely significant effect on European sites.
Section 7:	Waste			
MM7.a	7.2.15	In Nevember 2018, judgement was handed down from the Court of Justice of the European Union in the case of Cooperatie Mobilisation (Joined Cases C-293/17 and C-294/17, the 'Dutch Case'). The Dutch Case concluded that where a site is failing in its water quality objectives, and is therefore classed as being in an unfavourable condition, there is limited scope for the approval of additional damaging effects and that the future benefit of mitigation measures cannot be relied upon at Appropriate Assessment, where those benefits are uncertain at the time of the assessment.	To delete text that repeats the content of paragraph 3.3.36.	No change to HRA findings: The deleted text does not alter the previously identified HRA conclusions.

Mod. Ref.	Paragraph/Policy/ Figure Reference	Proposed Modification	Reason for Change	Does the Proposed Main Modification Affect the HRA Conclusions Previously Reported in the Publication Draft HRA Report?
MM7.b	7.2.16	Herefordshire Council subsequently prepared a Position Statement titled 'Current Development in the River Lugg catchment Area' dated 15 October 2019 (the 'Herefordshire Council Position Statement'. The Herefordshire Council Position Statement advises (on page 2) that:	To update the text recognising that this was no longer the most recent document on the matter.	No change to HRA findings: The deleted text does not alter the previously identified HRA conclusions.
ММ7.с	7.2.17	'There remains potential for a positive Appropriate Assessment to enable development to proceed, on Natural England's advice, where it can be demonstrated that any impacts would be neutral (where avoidance / mitigation measures included in the plan or project, counterbalance any nutrient (phosphate) increase from the plan or project), or would lead to 'betterment.'	To update the text.	No change to HRA findings: The deleted text does not alter the previously identified HRA conclusions.
MM7.d	7.2.25 As modified: 7.2.22	The waste management practices available to the agricultural sector are wide-ranging and varied, and can be expected to change over the plan period, for example Defra is due to publish the Farm Emissions Reduction Plan in 2020, which will also provide a framework of actions.	To update the text.	No change to HRA findings: The deleted text does not alter the previously identified HRA conclusions.
MM7.e	7.2.26 (new) FN50 (new)	The Agriculture and Horticulture Development Board (AHDB) purpose is 'to inspire our farmers, growers and industry to succeed in a rapidly changing world. We equip the industry with easy to use, practical know-how, which they can apply straight away to make better decisions and improve their performance'. It is operated as a statutory levy board and is funded by farmers, growers and others in the supply chain. https://ahdb.org.uk/	To incorporate guidance as advised by Herefordshire Ecology & Arboriculture Officer (Planning).	No change to HRA findings: The new text updates reference to a guidance document that does not alter the previously identified HRA conclusions.
MM7.f	7.2.27 (new)	The AHDB provides a wide range of advice to farmers and has prepared a Nutrient Management Guide (RB209) to explain the value of nutrients, soil and why good nutrient management is about more than just fertiliser application. Updates are also available on	To incorporate guidance as advised by Herefordshire Ecology & Arboriculture Officer (Planning).	No change to HRA findings: The new text updates reference to a guidance document that does not alter the previously identified HRA conclusions, indeed it is likely to help contribute to the mitigation of effects on the River Wye SAC.

Mod. Ref.	Paragraph/Policy/ Figure Reference	Proposed Modification	Reason for Change	Does the Proposed Main Modification Affect the HRA Conclusions Previously Reported in the Publication Draft HRA Report?
	FN51 (new)	the website. This advice (as may be amended over time) should be referenced in any development proposal. https://ahdb.org.uk/RB209		
MM7.g	7.2.28 (new) FN52 (new)	The River Wye SAC NMP River Lugg Catchment Position Statement (April 2021) provides advice on new thresholds relevant to discharges made within the surface or groundwater catchment of a designated site. This advice (as may be amended over time) should be referenced in any development proposal. Advice regarding nutrient neutrality is likely to change throughout the plan period. Up to date guidance available on Herefordshire Council's website should be consulted in understanding the current approach to nutrient neutrality.	To update the text.	No change to HRA findings: The new text updates reference to the latest River Wye SAC Nutrient Management Plan Position Statement relating to the River Lugg Catchment. However, it does not alter the previously identified HRA conclusions, indeed it is likely to help contribute to the mitigation of likely significant effects arising from changes in water quality, and therefore support the conclusion of no adverse effect on integrity on the River Wye SAC.
MM7.h	7.2.29 (new)	Any development proposal located within the catchment of the River Wye SAC can bring a risk of increased phosphate entering the designated site. It is likely that an appropriate assessment will be required to consider the likely significant effect of that project, along with any measures that may be implemented to address the risk.	To reflect the latest advice from NE.	No change to HRA findings: The new text provides clarification regarding the need for appropriate assessment for any development proposal located within the catchment of the River Wye SAC. However, it does not alter the previously identified HRA conclusions relating to policy W3, indeed it is likely to help contribute to the mitigation of likely significant effects arising from changes in water quality, and therefore support the conclusion of no adverse effect on integrity on the River Wye SAC.
MM7.j	Policy W3,3	All development proposals will be required to demonstrate delivery of a net reduction in nutrient discharges contributing to at least nutrient neutrality, or betterment, within the River Wye SAC.	To address comment raised in representation and to clarify the policy.	No change to HRA findings: The new text provides clarification regarding the need for development proposals to demonstrate at least nutrient neutrality within the River Wye SAC. However, it does not alter the previously identified HRA Screening and AA conclusions relating to policy W3, indeed it is likely to help contribute to the mitigation of likely significant effects arising from changes in water quality, and

Mod. Ref.	Paragraph/Policy/ Figure Reference	Proposed Modification	Reason for Change	Does the Proposed Main Modification Affect the HRA Conclusions Previously Reported in the Publication Draft HRA Report?
				therefore support the conclusion of no adverse effect on integrity on the River Wye SAC.
MM7.k	Policy W4	Planning permission will be granted to supported for the statutory water and sewerage undertaker to extend, upgrade, or make provision for new infrastructure necessary to ensure the statutory undertaker can continue to undertake its duty to supply potable water and treat foul flows. Works undertaken should contribute to achieving will be required to demonstrate at least nutrient neutrality, or betterment, within the River Wye SAC.	To make the policy text consistent throughout the MWLP. To address comment raised in representation and to clarify the policy.	No change to HRA findings: The new text provides clarification regarding the need for statutory water and sewerage infrastructure works undertaken to demonstrate at least nutrient neutrality within the River Wye SAC. However, it does not alter the previously identified HRA Screening and AA conclusions relating to policy W4, indeed it is likely to help contribute to the mitigation of likely significant effects arising from changes in water quality, and therefore support the conclusion of no adverse effect on integrity on the River Wye SAC.
MM7.m	Policy W5/3	at the following locations (presented in alphabetical order) subject to the key development criteria set out at section 9:	To ensure that the KDC are recognised as an element of policy under which each site is allocated.	No change to HRA findings: Proposed Main Modification MM7.m provides clarification only, would not result in development and does not give rise to a likely significant effect on European sites.
MM7.n	Policy W6/2a	Former Lugg Bridge Quarry, subject to the key development criteria set out at section 9;	To ensure that the KDC are recognised as an element of policy under which each site is allocated.	No change to HRA findings: Proposed Main Modification MM7.n provides clarification only, would not result in development and does not give rise to a likely significant effect on European sites.
ММ7.р	Policy W6/2b	strategic employment areas and industrial estates, subject to the key development criteria set out at section 9;	To ensure that the KDC are recognised as an element of policy under which each site is allocated.	No change to HRA findings: Proposed Main Modification MM7.p provides clarification only, would not result in development and does not give rise to a likely significant effect on European sites.
MM7.q	Policy W6/3	The sustainable disposal of inert wastes will be delivered at the following locations (presented in alphabetical order) subject to the key development criteria set out at section 9:	To ensure that the KDC are recognised as an element of policy under which each site is allocated.	No change to HRA findings: Proposed Main Modification MM7.q provides clarification only, would not result in development and does not give rise to a likely significant effect on European sites.

Mod. Ref.	Paragraph/Policy/ Figure Reference	Proposed Modification	Reason for Change	Does the Proposed Main Modification Affect the HRA Conclusions Previously Reported in the Publication Draft HRA Report?
MM7.r	Policy W7/1	Facilities for the reuse, recycling or recovery of materials shall will be supported where it is demonstrated that the proposed development will enable delivery of the waste hierarchy and/or make a positive contribution to achieving the circular economy in Herefordshire.	To make the policy text consistent throughout the MWLP.	No change to HRA findings: The minor wording change does not alter the previously identified findings of no likely significant effect for Policy W7.
MM7.s	Policy W7/2	Facilities for the recovery of energy shall will only be supported where it is demonstrated:	To make the policy text consistent throughout the MWLP.	No change to HRA findings: The minor wording change does not alter the previously identified findings of no likely significant effect for Policy W7.
MM7.t	existing facilities shall will be supported where it is demonstrated that: a. the proposed development will enable delivery of the waste hierarchy; and tidying up the terminology to	consistent throughout the	No change to HRA findings: The minor wording change does not alter the previously identified findings of no likely significant effect for Policy W7.	
		Amended formatting and tidying up the terminology to clarify the text of the policy.		
MM7.u	Policy W7/4	Planning permission may be granted supported if these expectations are demonstrated to be unachievable but that a material level of benefit is otherwise gained and no unacceptable adverse impact results from the proposed development.	Amended formatting to clarify the text of the policy.	No change to HRA findings: The minor wording change does not alter the previously identified findings of no likely significant effect for Policy W7.
Section 9	: Key Development Cri	iteria		
MM9.a	9.1.1	Each allocated site is subject to a number of key development criteria, which form part of the policy. These criteria simply identify the key matters that will be required to be carefully and comprehensively considered in preparing any development project at an allocated site.	To clarify the purpose of the KDC.	No change to HRA findings: Proposed Main Modification MM9.a provides clarification only, would not result in development and does not give rise to a likely significant effect on European sites.

Mod. Ref.	Paragraph/Policy/ Figure Reference	Proposed Modification	Reason for Change	Does the Proposed Main Modification Affect the HRA Conclusions Previously Reported in the Publication Draft HRA Report?	
MM9.b	9.1.2	The key development criteria do not replace development management policy; they are <u>a part of the policy within which they are referenced and are</u> additive to the requirements of all other policies within the development plan relevant to the project being proposed.	To clarify the purpose of the KDC.	No change to HRA findings: Proposed Main Modification MM9.b provides clarification only, would not result in development and does not give rise to a likely significant effect on European sites.	
MM9.c	9.1.4	In addition, tThe key development criteria are also presented, along with site mapping, in the Allocated Sites Appendix. The Allocated Sites Appendix is unlikely to be suitable for users of assisted technology, whilst Table 9 has been prepared to be easier to read.	To clarify the purpose of the KDC.	No change to HRA findings: Proposed Main Modification MM9.c provides clarification only, would not result in development and does not give rise to a likely significant effect on European sites.	
MM9.d	Table 9 Key Development Criteria	These changes are shown in Table 2.		See implications for HRA findings in Table A.2 below.	
Section 10	: Glossary				
MM10.a	Appropriate Assessment	Process for assessing impacts on European sites National Network Sites, habitats or species. It is a decision making tool.	To update the terminology.	Proposed Main Modifications MM10.a-MM10.j relate to the Glossary, which provides clarity regarding definitions of terms used in the MWLP and although it defines terms also used in the HRA, it does not need to be assessed as part of the HRA process.	
MM10.b	Conservation of Habitats and Species Regulations 2017 (as amended)	The abbreviated term used for the Conservation of Habitats and Species Regulations (England and Wales) 2017; as amended by the Conservation of Habitats and Species and Planning (Various Amendments) (England and Wales) Regulations 2018; and the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019.	To update the terminology and reflect recent legislative changes.		
MM10.c	Green Infrastructure	A planned and delivered network of green spaces and other environmental features designed and managed as a multifunctional resource providing a range of environmental and quality of life benefits for local communities. Green infrastructure includes parks, epen spaces, playing fields, woodlands, allotments and private gardens.	To update the Plan reflecting the new NPPF.		

Mod. Ref.	Paragraph/Policy/ Figure Reference	Proposed Modification	Reason for Change	Does the Proposed Main Modification Affect the HRA Conclusions Previously Reported in the Publication Draft HRA Report?
		A network of multi-functional green and blue spaces and other natural features, urban and rural, which is capable of delivering a wide range of environmental, economic, health and wellbeing benefits for nature, climate, local and wider communities and prosperity.		
MM10.d	Habitats Regulation Assessment	A Habitats Regulations Assessment is the assessment of the impacts of implementing a plan or policy on a Natura 2000 National Network Site.	To update the terminology.	
MM10.e	National Network Site(s)	The group terminology given to SAC, SPA and Ramsar Sites under the Conservation of Habitats and Species Regulations 2017 (as amended).	To update the terminology.	
MM10.f	Nutrient	The ecology of the River Wye SAC including the River Lugg and its catchment are sensitive to nitrate and phosphate concentration. Nitrate and phosphate are nutrients that promote algal growth, affecting the conservation objectives of the SAC.	To address comment raised in representation and to clarify the text of the MWLP.	
MM10.g	Nutrient Neutrality	The means of ensuring that development does not add to existing nutrient burdens and provides certainty that the whole of the scheme is deliverable in line with the requirements of the Conservation of Habitats and Species Regulations 2017 (as amended). Advice regarding nutrient neutrality is likely to change throughout the plan period. Up to date guidance available on Herefordshire Council's website should be consulted in understanding the current approach to nutrient neutrality.	To address comment raised in representation and to clarify the text of the MWLP.	
MM10.h	SAC	A Special Area of Conservation (SAC) is one given greater protection under Conservation of Habitats and Species Regulations 2017 (as amended). They have been designated because of a possible threat to the special habitats or species which they contain and to provide increased protection to a variety of animals, plants	To update the terminology and reflect recent legislative changes.	

Appendix A

Schedule of Proposed Main Modifications – HRA Implications

Mod. Ref.	Paragraph/Policy/ Figure Reference	Proposed Modification	Reason for Change	Does the Proposed Main Modification Affect the HRA Conclusions Previously Reported in the Publication Draft HRA Report?
		and habitats of importance to biodiversity both on a national and international scale. is defined in the European Union's Habitat Directive (92/43/EEC), also known as the Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora.		
MM10.j	SPA	A Special Protection Area (SPA) is designated under Conservation of Habitats and Species Regulations 2017 (as amended). Post transition the UK is still required to identify internationally important areas for breeding, over-wintering and migrating birds and designate them as SPA. is a designation under the European Union Directive on the Conservation of Wild Birds. Under the Directive, Member States of the European Union (EU) have a duty to safeguard the habitats of migratory birds and certain particularly threatened birds.	To update the terminology and reflect recent legislative changes.	
On line Interactive Mapping				
Webpage mapping		To include Minerals Safeguarded Areas including railheads.	To correct an omission found in the on-line resource.	This proposed Main Modification corrects the webpage mapping which in itself was not previously assessed in the HRA (although the specific locations and boundaries of all minerals and waste site allocations and safeguarded areas were assessed as part of the HRA process).

Table A.2: Key development criteria: Schedule of Proposed Modifications and Implications for the HRA

Mod. Ref.	Site Name and Policy	Key Development Criteria	Does the Proposed Main Modification Affect the HRA Conclusions Previously Reported in the Publication Draft HRA Report?
MM9.d.1	Black Hill Delve Policy M5(1,a&b)	Archaeology and geodiversity: Need to demonstrate the potential for archaeological remains or geological features to be present on the site, through desk-based assessment and/or field evaluation as appropriate. Mitigation will include recording, protection or recovery of any assets. Ancient Woodland: Need to demonstrate the level of effect on the ancient woodland, leaving a buffer adequate to protect the designation. Black Mountains SSSI: Need to demonstrate the level of effect on the key features of this designation. Dark Skies: Need to demonstrate that lighting will be kept to the minimum required to ensure safe working conditions on site. Green infrastructure: Operation and reclamation phases should deliver priorities of the Herefordshire Green Infrastructure Strategy, in particular those associated with District Strategy Corridor 8. Site design should deliver a net gain in biodiversity, linking priority habitats, and incorporate key features of the landscape character. Ground water: Located in the St. Maughans sandstone bedrock formation, classified a secondary aquifer. Need to demonstrate the potential risks for to the water environment, including abstractions (public and private supply) wells and springs. MOD Low Fly Zone: Need to demonstrate the level of effect on the current and likely future operations within the MOD Low Fly Zone. River Monnow: Need to demonstrate that vehicles can continue to access and leave the site, to and from the public highway, safely.	Site ref. M13 – no change to HRA findings: The proposed Main Modification provides clarity and does not alter the previous Screening conclusion of no likely significant effect for this site allocation.
MM9.d.2	Callow Delve Policy M5(1,a)	Ancient Woodland: Need to demonstrate the level of effect on the ancient woodland, leaving a buffer adequate to protect the designation. Dark Skies: Need to demonstrate that lighting will be kept to the minimum required to ensure safe working conditions on site.	Site ref M12 – no change to HRA findings: The proposed Main Modification provides clarification regarding the need for development proposals at Callow Delve to demonstrate at least nutrient neutrality within the River Wye SAC. However, it does not

Mod. Ref.	Site Name and Policy	Key Development Criteria	Does the Proposed Main Modification Affect the HRA Conclusions Previously Reported in the Publication Draft HRA Report?
		Flood Risk: Need to demonstrate that: the site will be safe in the event of a flood; risk is not increased on site or elsewhere; and where possible, flood risk is decreased. Flood alleviation should be considered in designing site reclamation. Green infrastructure: Operation and reclamation phases should deliver priorities of the Herefordshire Green Infrastructure Strategy. Site design should deliver a net gain in biodiversity, providing enhancement for priority bird species, and incorporate key features of the landscape character. Ground water: Located within the Brownstones formation, classified a secondary aquifer and adjacent to a groundwater spring source protection zone for public drinking water supply. Need to demonstrate the potential risks to the water environment, including private drinking water supply abstractions (public and private supply) wells and springs. River Wye SAC: An Appropriate Assessment is required to demonstrate no the likely significant effect(s) on the SAC. Development should will be required to demonstrate at least nutrient neutrality of betterment. Site Access: Need to demonstrate that vehicles can continue to access and leave the site, to and from the public highway, safely. Woodland at Welsh Newton & Callow Hill LWS: Need to demonstrate the likely effect on the key features of the designated site. Wye Valley Woodlands SAC and Wye Valley & Forest of Dean Bat Sites SAC: An Appropriate Assessment is required to demonstrate the no likely significant effect(s) on the SAC. Need to demonstrate how habitat severance for horseshoe bats will be prevented, which may require the	alter the previously identified HRA Screening and AA conclusions relating to this site allocation and Policy M5, indeed it is likely to help contribute to the mitigation of likely significant effects arising from changes in water quality, and therefore support the conclusion of no adverse effect on integrity on the River Wye SAC. Similarly, the clarification in terms of the AA needing to demonstrate no likely significant effects on the Wye Valley Woodlands SAC and Wye Valley & Forest of Dean Bat Sites SAC will help contribute to mitigating any likely significant effect of loss of habitat and therefore supports the conclusion of no adverse effects on integrity of these two SACs.
MM9.d.3	Former City Spares Site Policy W5(3)	periphery woodland to be retained. Archaeology: Need to demonstrate the potential for archaeological remains to be present on the site, through desk-based assessment and/or field evaluation as appropriate. Mitigation will include recording,	Site ref. W19 – no change to HRA findings: The proposed Main Modification
		protection or recovery of any assets. Contaminated land: Recognising the site as a former car breakers' yard, there is a high potential for contaminated land. The site is located within a drinking water protected area. Need to demonstrate how any contamination on site will be identified and remediated, particularly with reference to protection of drinking water.	provides clarity and does not alter the previous Screening conclusion of no likely significant effect for this site allocation.

Mod. Ref.	Site Name and Policy	Key Development Criteria	Does the Proposed Main Modification Affect the HRA Conclusions Previously Reported in the Publication Draft HRA Report?
		Landscape: The site is set at a lower level than surrounding land but occupies a position on the southern boundary of Hereford. Need to demonstrate the level of effect on the surrounding landscape. Site design should deliver a net gain in biodiversity, providing enhancement for priority bird species, and incorporate key features of the landscape character.	
		River Wye SAC: An Appropriate Assessment is required to demonstrate <u>no</u> the likely significant effect(s) on the SAC. Development should will be required to demonstrate at least nutrient neutrality or betterment.	
		Veteran tree: Need to demonstrate level of effect on ancient black poplar located to the north of the site.	
MM9.d.4	Former Lugg Bridge Quarry Policy W6(1,a)	Archaeology: Need to demonstrate the potential for archaeological remains to be present on the site, through desk-based assessment and/or field evaluation as appropriate. Mitigation will include recording, protection or recovery of any assets.	Site ref. W13 – no change to HRA findings: The proposed Main Modification provides clarification regarding the need for
		Flood Risk: Need to demonstrate that: the site will be safe in the event of a flood; risk is not increased on site or elsewhere; and where possible, flood risk is decreased. Flood alleviation should be considered in designing site reclamation.	development proposals at Former Lugg Bridge Quarry to demonstrate at least nutrient neutrality within the River Wye SAC. However, it does not alter the previously
		Green infrastructure: Operation and reclamation phases should deliver priorities of the Herefordshire Green Infrastructure Strategy, in particular those associated with District Strategy Corridor 2, District Enhancement Zone 2 and Hereford Fringe Zone 1. Site design should deliver a net gain in biodiversity, providing enhancement for priority bird species, and incorporate key features of the landscape character.	identified HRA Screening and AA conclusions relating to this site allocation and Policy W6, indeed it is likely to help contribute to the mitigation of likely significant effects arising from changes in water quality, and therefore
		Little Lung Diver Need to demonstrate the level of effect on water quality and hydrology of the Little	support the conclusion of no adverse effect

Little Lugg River: Need to demonstrate the level of effect on water quality and hydrology of the Little

Site reclamation: Due to the site having a mineral working history and rural location it is required to be reclaimed at the earliest opportunity should current operations cease (as consented under references:

River Lugg SSSI: Need to demonstrate the level of effect on the key features of this designation. **River Wye SAC:** An Appropriate Assessment is required to demonstrate no the likely significant effect(s) on the SAC. Development should will be required to demonstrate at least nutrient neutrality or

131870/N, dated 22.07.2013; 151184, dated 10.11.2015; and 162032, dated 02.12.2016).

Lugg River.

betterment.

June 2022

on integrity on the River Wye SAC.

Mod. Ref.	Site Name and Policy	Key Development Criteria	Does the Proposed Main Modification Affect the HRA Conclusions Previously Reported in the Publication Draft HRA Report?
		Utilities: Utility infrastructure (gas) that cross the site may require diversion or a non-working buffer to enable the site to be worked.	
MM9.d.5	Hereford Enterprise Zone (Rotherwas Industrial Estate) Policy W5(2)	Ancient Woodland: Need to demonstrate the level of effect on the ancient woodland, leaving a buffer adequate to protect the designation. Archaeology: Need to demonstrate the potential for archaeological remains to be present on the site, through desk-based assessment and/or field evaluation as appropriate. Mitigation will include recording, protection or recovery of any assets. Contaminated land: Recognising the site as a former munitions factory, there is a high potential for contaminated land. The site is located within a drinking water protected area. Need to demonstrate how any contamination on site will be identified and remediated, particularly with reference to protection of drinking water. Flood Risk: Site-specific flood risk assessment required to demonstrate compliance with Local Development Order. Reference should be made to the Drainage and Flood Management Strategy (2009 and as amended). Hampton Grange medical facility: Need to demonstrate the level of effect on the amenity, health & safety and environment of this medical facility. Heritage assets: Need to demonstrate the level of effect less than substantial harm on heritage asset(s) and their setting(s), particularly listed buildings and the scheduled monuments Rotherwas House and Rotherwas Chapel. Landscaping: Site design should deliver a net gain in biodiversity, linking priority habitat, and providing enhancement for priority habitats, and incorporate key features of the landscape character. Pool at Rotherwas LWS: Need to demonstrate the level of effect on the key features of this designation.	Site ref. W58 (Strategic Employment Area) – no change to HRA findings: The proposed Main Modification provides clarity and does not alter the previous Screening conclusion of no likely significant effect for this site allocation.
		River Wye: Need to demonstrate the level of effect on water quality and hydrology of the River Wye. River Wye SAC: An Appropriate Assessment is required to demonstrate no the likely significant effect(s) on the SAC. Development should will be required to demonstrate at least nutrient neutrality or betterment.	

Mod. Ref.	Site Name and Policy	Key Development Criteria	Does the Proposed Main Modification Affect the HRA Conclusions Previously Reported in the Publication Draft HRA Report?	
		River Wye SSSI: Need to demonstrate the level of effect on the key features of this designation.		
		Veteran tree: Need to demonstrate level of effect on ancient black poplars located within the site, with a priority given to avoidance.		
MM9.d.6	Holmer Road Policy W5(2)	Flood Risk: Need to demonstrate that: the site will be safe in the event of a flood; risk is not increased on site or elsewhere; and where possible, flood risk is decreased.	Site ref. W61 (Strategic Employment Area) - no change to HRA findings: The	
	1 01109 110(2)	Hereford AQMA: Need to demonstrate the level of effect on air quality, particularly within the Hereford AQMA.	proposed Main Modification provides clarity and does not alter the previous Screening conclusion of no likely significant effect for	
		Landscaping: Site design should deliver a net gain in biodiversity, providing enhancement for priority bird species, and incorporate key features of the landscape character.	this site allocation.	
		River Wye SAC: An Appropriate Assessment is required to demonstrate <u>no</u> the likely significant effect(s) on the SAC. Development should <u>will be required to</u> demonstrate <u>at least</u> nutrient neutrality or betterment .		
		Road network: Need to demonstrate the level of effect on the local road network in the vicinity of the site.		
		Sensitive properties: Need to demonstrate the level of effect on the amenity, health & safety and environment of nearby sensitive properties (housing and schools).		
MM9.d.7	Kington Household Waste and Recycling Centre	Waste and Recycling Southern boundary of Kington. Need to demons Site design should deliver a net gain in biodiver	Landscape: The site is set at a lower level than surrounding land but occupies a position on the southern boundary of Kington. Need to demonstrate the level of effect on the surrounding landscape. Site design should deliver a net gain in biodiversity, providing enhancement for priority bird species, and incorporate key features of the landscape character.	Site ref. W10 – no change to HRA findings: The proposed Main Modification provides clarity and does not alter the previous Screening conclusion of no likely
	Tolley He(e)	River Wye SAC: An Appropriate Assessment is required to demonstrate <u>no</u> the likely significant effect(s) on the SAC. Development should will be required to demonstrate at least nutrient neutrality erbetterment.	significant effect for this site allocation.	
MM9.d.8	Land between Little Marcle Road and Ross Road	Archaeology: Need to demonstrate the potential for archaeological remains to be present on the site, through desk-based assessment and/or field evaluation as appropriate. Mitigation will include recording, protection or recovery of any assets.	Site ref. W64 (Strategic Employment Area) – no change to HRA findings: The proposed Main Modification provides clarity	
	Policy W5(2)		and does not alter the previous Screening	

Mod. Ref.	Site Name and Policy	Key Development Criteria	Does the Proposed Main Modification Affect the HRA Conclusions Previously Reported in the Publication Draft HRA Report?
		Flood Risk: Need to demonstrate that: the site will be safe in the event of a flood; risk is not increased on site or elsewhere; and where possible, flood risk is decreased.	conclusion of no likely significant effect for this site allocation.
		Heritage assets: Need to demonstrate the level of effect less than substantial harm on heritage asset(s) and their setting(s), particularly listed buildings in the vicinity of the site.	
		Landscape: The site is set at a lower level than surrounding land but occupies a position on the south western boundary of Ledbury. Need to demonstrate the level of effect on the surrounding landscape. Site design should deliver a net gain in biodiversity, providing enhancement for priority bird species, and incorporate key features of the landscape character.	
		River Leadon: Need to demonstrate the level of effect on water quality and hydrology of the River Leadon.	
		Sensitive properties: Need to demonstrate the level of effect on the amenity, health & safety and environment of nearby sensitive properties (housing, hotel and picnic site).	
MM9.d.9	Leinthall Quarry Policy M4(2,a)	Dark Skies: Need to demonstrate that lighting will be kept to the minimum required to ensure safe working conditions on site.	Site ref. M07a and M07b – no change to HRA findings: The proposed Main
		Downton Gorge SAC: An Appropriate Assessment is required to demonstrate the likely significant effect(s) on the SAC.	Modification provides clarity and does not alter the previous Screening conclusion of no likely significant effect for this site allocation.
		Geodiversity: Need to demonstrate the level of effect on geodiversity and incorporate mitigation measures as appropriate. Mitigation will include recording, protection or recovery of any assets.	, ,
		Green infrastructure: Operation and reclamation phases should deliver priorities of the Herefordshire Green Infrastructure Strategy, in particular those associated with District Strategy Corridor 9. Site design should deliver a net gain in biodiversity, linking priority habitats, and incorporate key features of the landscape character.	
		Ground water: Located within the hard rock of the Silurian Aymestry Limestone Formation, classified as a secondary aquifer. Need to demonstrate the potential risks to the water environment, including abstractions (public and private supply) wells and springs.	
		Heritage assets: Need to demonstrate the level of effect on heritage assets and their settings, particularly of Croft Ambrey Hill Fort and Croft Castle Park.	

Mod. Ref.	Site Name and Policy	Key Development Criteria	Does the Proposed Main Modification Affect the HRA Conclusions Previously Reported in the Publication Draft HRA Report?
		Phased working: Need to demonstrate optimum phasing of the allocated area, including how existing infrastructure will be used (to include at least site access and processing equipment) and reclamation at the earliest opportunity. A proliferation of ancillary infrastructure will not be permitted.	
		River Teme SSSI and River Lugg SSSI: Need to demonstrate the level of effect on the key features of these designations.	
		Sensitive properties: Need to demonstrate the level of effect on the amenity, health & safety and environment of nearby sensitive properties (housing)	
		Veteran tree: Need to demonstrate level of effect on ancient yew tree located to the south of the site.	
MM9.d.10	Leominster Enterprise Park Policy W5(2)	Archaeology: Need to demonstrate the potential for archaeological remains to be present on the site, through desk-based assessment and/or field evaluation as appropriate. Mitigation will include recording, protection or recovery of any assets. Flood Risk: Need to demonstrate that: the site will be safe in the event of a flood; risk is not increased on site or elsewhere; and where possible, flood risk is decreased. Heritage assets: Need to demonstrate the level of effect less than substantial harm on heritage asset(s) and their setting(s), particularly listed buildings in the vicinity of the site. Landscape: The site is set at a lower level than surrounding land but occupies a position on the	Site ref. W62 (Strategic Employment Area) – no change to HRA findings: The proposed Main Modification provides clarity and does not alter the previous Screening conclusion of no likely significant effect for this site allocation.
		southern boundary of Leominster. Need to demonstrate the level of effect on the surrounding landscape. Site design should deliver a net gain in biodiversity, providing enhancement for priority bird species, and incorporate key features of the landscape character.	
		River Lugg: Need to demonstrate the level of effect on water quality and hydrology of the River Lugg.	
		River Lugg SSSI: Need to demonstrate the level of effect on the key features of this designation.	
		River Wye SAC: An Appropriate Assessment is required to demonstrate <u>no</u> the likely significant effect(s) on the SAC. Development should will be required to demonstrate at least nutrient neutrality or betterment.	
		Sensitive properties: Need to demonstrate the level of effect on the amenity, health & safety and environment of nearby sensitive properties (schools, cemetery and associated place of worship).	

Mod. Ref.	Site Name and Policy	Key Development Criteria	Does the Proposed Main Modification Affect the HRA Conclusions Previously Reported in the Publication Draft HRA Report?
		Source Protection Zone 3: Need to demonstrate how any pathways for contamination will be identified and avoided.	
MM9.d.24	Leominster Household Waste Site and Household Waste Recovery Centre Policy W5(3)	Heritage assets: Need to demonstrate the level of effect less than substantial harm on heritage asset(s) and their setting(s). Landscaping: Site design should deliver a net gain in biodiversity, providing enhancement for priority bird species, and incorporate key features of the landscape character. River Lugg: Need to demonstrate the level of effect on water quality and hydrology of the River Lugg. River Lugg SSSI: Need to demonstrate the level of effect on the key features of this designation. River Wye SAC: An Appropriate Assessment is required to demonstrate no the likely significant effect(s) on the SAC. Development should will be required to demonstrate at least nutrient neutrality or betterment.	Site ref. W05 – no change to HRA findings: The proposed Main Modification provides clarification regarding the need for development proposals at Leominster Household Waste Site and Household Waste Recovery Centre to demonstrate at least nutrient neutrality within the River Wye SAC. However, it does not alter the previously identified HRA Screening and AA conclusions relating to this site allocation and Policy W5, indeed it is likely to help contribute to the mitigation of likely significant effects arising from changes in water quality, and therefore support the conclusion of no adverse effect on integrity on the River Wye SAC.
MM9.d.11	Llandraw Delve Policy M5(1,a&b)	Dark Skies: Need to demonstrate that lighting will be kept to the minimum required to ensure safe working conditions on site. Green infrastructure: Operation and reclamation phases should deliver priorities of the Herefordshire Green Infrastructure Strategy, in particular those associated with District Strategy Corridor 8. Site design should deliver a net gain in biodiversity, providing enhancement for priority bird species, and incorporate key features of the landscape character. Ground water: Located in the St. Maughans sandstone bedrock formation, classified a secondary aquifer and proximate to the side of the Black Mountains where many springs and watercourses issue off the slopes. Need to demonstrate the potential risks for to the water environment, including abstractions (public and private supply) wells and springs. MOD Danger Area and Low Fly Zone: Need to demonstrate the level of effect on the current and likely future operations within the MOD Danger Area and Low Fly Zone.	Site ref. M16 – no change to HRA findings: The proposed Main Modification provides clarity and does not alter the previous Screening conclusion of no likely significant effect for this site allocation.

Mod. Ref.	Site Name and Policy	Key Development Criteria	Does the Proposed Main Modification Affect the HRA Conclusions Previously Reported in the Publication Draft HRA Report?
		River Monnow: Need to demonstrate the level of effect on water quality and hydrology of the River Monnow.	
		Site Access: Need to demonstrate that vehicles can continue to access and leave the site, to and from the public highway, safely.	
MM9.d.12	Model Farm Policy W5(2)	Archaeology: Need to demonstrate the potential for archaeological remains to be present on the site, through desk-based assessment and/or field evaluation as appropriate. Mitigation will include recording, protection or recovery of any assets. Heritage assets: Need to demonstrate the level of effect less than substantial harm on heritage asset(s) and their setting(s), particularly listed buildings in the vicinity of the site.	Site ref. W65 (Strategic Employment Area) – no change to HRA findings: The proposed Main Modification provides clarity and does not alter the previous Screening conclusion of no likely significant effect for this site allocation.
		Landscape: The site is set at a lower level than surrounding land but occupies a position on the eastern side of Ross-on-Wye. Need to demonstrate the level of effect on the surrounding landscape. Site design should deliver a net gain in biodiversity, providing enhancement for priority bird species, and incorporate key features of the landscape character.	tills site allocation.
		River Wye SAC: An Appropriate Assessment is required to demonstrate <u>no</u> the likely significant effect(s) on the SAC. Development should will be required to demonstrate <u>at least</u> nutrient neutrality or betterment.	
		Wye Valley AONB: Need to demonstrate the level of effect on the AONB.	
		Source Protection Zone 2: Need to demonstrate how any pathways for contamination will be identified and avoided.	
MM9.d.13	Moreton Business Park Policy W5(2)	Archaeology: Need to demonstrate the potential for archaeological remains to be present on the site, through desk-based assessment and/or field evaluation as appropriate. Mitigation will include recording, protection or recovery of any assets.	Site ref. W66 (Strategic Employment Area) – no change to HRA findings: The proposed Main Modification provides
	, s,(<u>=</u>)	Ancient Woodland: Need to demonstrate the level of effect on the ancient woodland, leaving a buffer adequate to protect the designation.	clarification regarding the need for development proposals at Moreton Business Park to demonstrate at least nutrient
		Flood Risk: Need to demonstrate that: the site will be safe in the event of a flood; risk is not increased on site or elsewhere; and where possible, flood risk is decreased.	neutrality within the River Wye SAC. However, it does not alter the previously identified HRA Screening and AA conclusions relating to this site allocation and Policy W5,

Mod. Ref.	Site Name and Policy	Key Development Criteria	Does the Proposed Main Modification Affect the HRA Conclusions Previously Reported in the Publication Draft HRA Report?
		Heritage assets: Need to demonstrate the level of effect less than substantial harm on heritage asset(s) and their setting(s), particularly listed buildings and Sutton Walls Hillfort, St Mary's Church and the historic core of Malden and other listed buildings.	indeed it is likely to help contribute to the mitigation of likely significant effects arising from changes in water quality, and therefore
		Landscape: The site is set at a lower level than surrounding land but occupies a rural position. Need to demonstrate the level of effect on the surrounding landscape. Site design should deliver a net gain in biodiversity, providing enhancement for priority habitats, and incorporate key features of the landscape character.	support the conclusion of no adverse effect on integrity on the River Wye SAC.
		Rail: Need to demonstrate the potential to use the rail network for the transport of materials or that the proposal does not prevent future use of the rail infrastructure available within the site.	
		River Wye SAC: An Appropriate Assessment is required to demonstrate <u>no</u> the likely significant effect(s) on the SAC. Development should will be required to demonstrate at least nutrient neutrality or betterment.	
		Wellington Brook and Moreton Brook: Need to demonstrate the level of effect on water quality and hydrology of these watercourses.	
		Wellington Marsh LWS: Need to demonstrate the level of effect on the key features of this designation.	
MM9.d.15	Perton Quarry Policy M4(2,a)	Archaeology: Need to demonstrate the potential for archaeological remains to be present on the site, through desk-based assessment and/or field evaluation as appropriate. Mitigation will include recording, protection or recovery of any assets.	Site ref. M10a and M10b – no change to HRA findings: The proposed Main Modification provides clarity and does not
		Dark Skies: Need to demonstrate that lighting will be kept to the minimum required to ensure safe working conditions on site.	alter the previous Screening conclusion of I likely significant effect for this site allocation
		Geodiversity, Perton Roadside Section and Quarry SSSI: Need to demonstrate the level of effect on geodiversity and incorporate mitigation measures as appropriate. Mitigation will include recording, protection or recovery of any assets.	
		Green infrastructure: Operation and reclamation phases should deliver priorities of the Herefordshire Green Infrastructure Strategy, in particular those associated with District Strategy Corridor 3. Site design should deliver a net gain in biodiversity, providing enhancement for priority bird species, and incorporate key features of the landscape character.	

Mod. Ref.	Site Name and Policy	Key Development Criteria	Does the Proposed Main Modification Affect the HRA Conclusions Previously Reported in the Publication Draft HRA Report?
		Ground water: Located within the Silurian Limestones and shales of the Woolhope Dome structure, classified as a secondary aquifer. Need to demonstrate the potential risks to the water environment, including abstractions (public and private supply) wells and springs.	
		Heritage assets: Need to demonstrate less than substantial harm on Registered Park and Garden Stoke Edith.	
		Peregrine Falcons: This is a species protected under Schedule 1 of the Wildlife and Countryside Act 1981.	
		Phased working: Need to demonstrate optimum phasing of the allocated area, including how existing infrastructure will be used (to include at least site access and processing equipment) and reclamation at the earliest opportunity. A proliferation of ancillary infrastructure will not be permitted.	
		River Lugg SSSI: Need to demonstrate the level of effect on the key features of this designation.	
		River Wye SAC: An Appropriate Assessment is required to demonstrate no the likely significant effect(s) on the SAC. Development should will be required to demonstrate at least nutrient neutrality or betterment.	
		Sensitive properties: Need to demonstrate the level of effect on the amenity, health & safety and environment of nearby sensitive properties (housing).	
MM9.d.16	Shobdon Quarry Policy M3(2,a)	Archaeology: Need to demonstrate the potential for archaeological remains to be present on the site, through desk-based assessment and/or field evaluation as appropriate. Mitigation will include recording, protection or recovery of any assets.	Site ref. M04 – no change to HRA findings: The proposed Main Modification provides clarification regarding the need for
	Policy W6(2)	Flood Risk: Need to demonstrate that: the site will be safe in the event of a flood; risk is not increased on site or elsewhere; and where possible, flood risk is decreased. Flood alleviation should be considered in designing site reclamation.	development proposals at Shobdon Quarry to demonstrate at least nutrient neutrality within the River Wye SAC. However, it does not alter the previously identified HRA Screening
		Geodiversity: Need to demonstrate the level of effect on geodiversity and incorporate mitigation measures as appropriate. Mitigation will include recording, protection or recovery of any assets.	and AA conclusions relating to this site allocation and Policies M3 and W6, indeed it is likely to help contribute to the mitigation of
		Green infrastructure and reclamation: Operation and reclamation phases should deliver priorities of the Herefordshire Green Infrastructure Strategy, in particular those associated with District Enhancement Zone 2. Site design should deliver a net gain in biodiversity, providing enhancement for priority bird species, and incorporate key features of the landscape character.	likely significant effects arising from changes in water quality, and therefore support the conclusion of no adverse effect on integrity on the River Wye SAC.

Mod. Ref.	Site Name and Policy	Key Development Criteria	Does the Proposed Main Modification Affect the HRA Conclusions Previously Reported in the Publication Draft HRA Report?
		Ground water: Glaciofluvial sand and gravel deposits represent a secondary aquifer in hydraulic continuity with watercourses. Need to demonstrate the potential risks to the water environment, including abstractions (public and private supply) wells and springs.	
		Housing: Need to demonstrate the level of effect on residential amenity at nearby properties.	
		Pinsley Brook: Need to demonstrate the level of effect on water quality and hydrology in Pinsley Brook.	
		Phased working: Need to demonstrate optimum phasing of the allocated area, including how existing infrastructure will be used (to include at least site access and processing equipment) and reclamation at the earliest opportunity. A proliferation of ancillary infrastructure will not be permitted.	
		River Wye SAC: An Appropriate Assessment is required to demonstrate no the likely significant effect(s) on the SAC. Development should will be required to demonstrate at least nutrient neutrality or betterment.	
		Shobdon Airfield: Need to demonstrate the level of effect on the current and likely future operations of Shobdon Airfield.	
MM9.d.17	Southern Avenue Policy W5(2)	Archaeology: Need to demonstrate the potential for archaeological remains to be present on the site, through desk-based assessment and/or field evaluation as appropriate. Mitigation will include recording, protection or recovery of any assets.	Site ref. W63 (Strategic Employment Area) – no change to HRA findings: The proposed Main Modification provides
		Flood Risk: Need to demonstrate that: the site will be safe in the event of a flood; risk is not increased on site or elsewhere; and where possible, flood risk is decreased.	clarification regarding the need for development proposals at Southern Avenue to demonstrate at least nutrient neutrality
		Heritage assets: Need to demonstrate the level of effect less than substantial harm on heritage asset(s) and their setting(s), particularly listed buildings in the vicinity of the site.	within the River Wye SAC. However, it does not alter the previously identified HRA
		Landscape: The site is set at a lower level than surrounding land but occupies a position on the southern boundary of Leominster. Need to demonstrate the level of effect on the surrounding landscape. Site design should deliver a net gain in biodiversity, providing enhancement for priority bird species, and incorporate key features of the landscape character.	Screening and AA conclusions relating to this site allocation and Policy W5, indeed it is likely to help contribute to the mitigation of likely significant effects arising from changes in water quality, and therefore support the
		River Lugg: Need to demonstrate the level of effect on water quality and hydrology of the River Lugg.	conclusion of no adverse effect on integrity on the River Wye SAC.
		River Lugg SSSI: Need to demonstrate the level of effect on the key features of this designation.	on the raver wye one.

Mod. Ref.	Site Name and Policy	Key Development Criteria	Does the Proposed Main Modification Affect the HRA Conclusions Previously Reported in the Publication Draft HRA Report?
		River Wye SAC: An Appropriate Assessment is required to demonstrate no the likely significant effect(s) on the SAC. Development should will be required to demonstrate at least nutrient neutrality or betterment.	
		Sensitive properties: Need to demonstrate the level of effect on the amenity, health & safety and environment of nearby sensitive properties (schools, cemetery and associated place of worship).	
		Source Protection Zones 1 and 2: Need to demonstrate how any pathways for contamination will be identified and avoided.	
MM9.d.18	Sunnybank Delve Policy M5(1,a)	Dark Skies: Need to demonstrate that lighting will be kept to the minimum required to ensure safe working conditions on site.	Site ref. M18 – no change to HRA findings: This row was included in error by the Council
	Tolloy Mo(1,a)	Green infrastructure: Operation and reclamation phases should deliver priorities of the Herefordshire Green Infrastructure Strategy, in particular those associated with District Strategy Corridor 8. Site design should deliver a net gain in biodiversity, providing enhancement for priority bird species, and incorporate key features of the landscape character.	and there is no proposed Main Modification for Sunnybank Delve's KDC. Therefore, this does not alter the previous Screening conclusion of no likely significant effect for this site allocation.
		Housing: Need to demonstrate the level of effect on residential amenity at nearby properties.	
		MOD Danger Area and Low Fly Zone: Need to demonstrate the level of effect on the current and likely future operations within the MOD Danger Area and Low Fly Zone.	
		Pikes Farm Meadows SSSI: Need to demonstrate the level of effect on the key features of this designation.	
MM9.d.19	Three Elms Trading Estate	Heritage assets: Need to demonstrate the level of effect less than substantial harm on heritage asset(s) and their setting(s), particularly listed buildings in the vicinity of the site.	Site ref. W60 (Strategic Employment Area) - no change to HRA findings: The
	Policy W5(2)	Landscaping: Site design should deliver a net gain in biodiversity, providing enhancement for priority habitats, and incorporate key features of the landscape character.	proposed Main Modification provides clarity and does not alter the previous Screening conclusion of no likely significant effect for
		River Wye SAC: An Appropriate Assessment is required to demonstrate no the likely significant effect(s) on the SAC. Development should will be required to demonstrate at least nutrient neutrality or betterment.	this site allocation.
		Sensitive properties: Need to demonstrate the level of effect on the amenity, health & safety and environment of nearby sensitive properties (housing and schools).	

Mod. Ref.	Site Name and Policy	Key Development Criteria	Does the Proposed Main Modification Affect the HRA Conclusions Previously Reported in the Publication Draft HRA Report?
		Yazor Brook: Need to demonstrate the level of effect on water quality and hydrology of the Yazor Brook.	
MM9.d.20	Upper Lyde Quarry Policy M3(2,a)	Archaeology: Need to demonstrate the potential for archaeological remains to be present on the site, through desk-based assessment and/or field evaluation as appropriate. Mitigation will include recording, protection or recovery of any assets.	Site ref. M03a and M03c – no change to HRA findings: The proposed Main Modification provides clarity and does not
	Policy W6(2)	Geodiversity: Need to demonstrate the level of effect on geodiversity and incorporate avoidance, mitigation and monitoring measures as appropriate. Mitigation will include recording, protection or recovery of any assets.	alter the previous Screening conclusion of no likely significant effect for this site allocation.
		Green infrastructure and reclamation: Operation and reclamation phases should deliver priorities of the Herefordshire Green Infrastructure Strategy, in particular those associated with District Strategy Corridor 2 and Hereford Fringe Zone 4. Site design should deliver a net gain in biodiversity, providing enhancement for priority bird species, and incorporate key features of the landscape character.	
		Ground water: Glaciofluvial sand and gravel deposits represent a secondary aquifer in hydraulic continuity with watercourses. Need to demonstrate the potential risks to the water environment, including abstractions (public and private supply) wells and springs.	
		Housing: Need to demonstrate the level of effect on residential amenity at nearby properties.	
		Phased working: Need to demonstrate optimum phasing of the allocated area, including how existing infrastructure will be used (to include at least site access and processing equipment) and reclamation at the earliest opportunity. A proliferation of ancillary infrastructure will not be permitted.	
		River Lugg: Need to demonstrate the level of effect on water quality and hydrology of these watercourses.	
		River Lugg SSSI: Need to demonstrate the level of effect on the key features of this designation.	
		River Wye SAC: An Appropriate Assessment is required to demonstrate <u>no</u> the likely significant effect(s) on the SAC. Development should will be required to demonstrate <u>at least</u> nutrient neutrality of betterment.	
		Road network: Highways England identifies the site as located near to the strategic road network. Need to demonstrate the level of effect on the local road network in the vicinity of the site.	

Mod. Ref.	Site Name and Policy	Key Development Criteria	Does the Proposed Main Modification Affect the HRA Conclusions Previously Reported in the Publication Draft HRA Report?
MM9.d.21	Wellington Quarry Policy M3(2,a) Policy W6(2)	Archaeology and geodiversity: Need to demonstrate the potential for archaeological remains or geological features to be present on the site, through desk-based assessment and/or field evaluation as appropriate. Mitigation will include recording, protection or recovery of any assests. Flood Risk: Need to demonstrate that: the site will be safe in the event of a flood; risk is not increased on site or elsewhere (including Leystone Bridge); and where possible, flood risk is decreased. Flood alleviation should be considered in designing site reclamation. Footpath: Wellington footpaths 23, 23A and 34 cross the site and may require diversion or a non-working buffer such that the amenity value and connectivity of the footpaths are maintained. Green infrastructure: Operation and reclamation phases should deliver priorities of the Herefordshire Green Infrastructure Strategy, in particular those associated with District Strategy Corridor 1 and District Enhancement Zone 3. Site design should deliver a net gain in biodiversity, providing enhancement for priority habitats, and incorporate key features of the landscape character. Ground water: Glaciofluvial sand and gravel deposits represent a secondary aquifer in hydraulic continuity with watercourses. Need to demonstrate the potential risks to the water environment, including abstractions (public and private supply) wells and springs. Heritage assets: Need to demonstrate the level of effect less than substantial harm on heritage asset(s) and their setting(s) particularly Sutton Walls Fort. Marches Line: A non-working buffer may be required such that railway safety is maintained. Otter: Detail protected species survey required to determine any site-specific mitigation and protection measures. Phased working: Need to demonstrate optimum phasing of the allocated area, including how existing infrastructure will be used (to include at least site access and processing equipment) and reclamation at the earliest opportunity. A proliferation of ancillary infrastructure will	Site ref. M05 – no change to HRA findings: The proposed Main Modification provides clarification regarding the need for development proposals at Wellington Quarry to demonstrate at least nutrient neutrality within the River Wye SAC. However, it does not alter the previously identified HRA Screening and AA conclusions relating to this site allocation and Policies M3 and W6, indeed it is likely to help contribute to the mitigation of likely significant effects arising from changes in water quality, and therefore support the conclusion of no adverse effect on integrity on the River Wye SAC.

Mod. Ref.	Site Name and Policy	Key Development Criteria	Does the Proposed Main Modification Affect the HRA Conclusions Previously Reported in the Publication Draft HRA Report?
		River Wye SAC: An Appropriate Assessment is required to demonstrate no the likely significant effect(s) on the SAC. Development should will be required to demonstrate at least nutrient neutrality or betterment.	
		Road network: Highways England identifies this site as located near to the strategic road network. Need to demonstrate the level of effect on the A49 and that vehicles can access and leave the site, to and from the public highway, safely.	
		Sensitive properties: Need to demonstrate the level of effect on the amenity, health & safety and environment of nearby sensitive properties (school and housing).	
		Utilities: Utility infrastructure (high pressure gas, water mains and foul sewer) that cross the site may require diversion or a non-working buffer to enable the site to be worked.	
MM9.d.22	Westfields Trading Estate	Flood Risk: Need to demonstrate that: the site will be safe in the event of a flood; risk is not increased on site or elsewhere; and where possible, flood risk is decreased.	Site ref. W59 (Strategic Employment Area) – no change to HRA findings: The
	Policy W5(2)	Hereford AQMA: Need to demonstrate the level of effect on air quality, particularly within the Hereford AQMA.	proposed Main Modification provides clarity and does not alter the previous Screening conclusion of no likely significant effect for
		Heritage assets: Need to demonstrate the level of effect less than substantial harm on heritage asset(s) and their setting(s), particularly listed buildings in the vicinity of the site.	this site allocation.
		Landscaping: Site design should deliver a net gain in biodiversity, providing enhancement for priority habitats, and incorporate key features of the landscape character.	
		Plough Lane LWS, Widemarsh Brook LWS and Yazor Brook LWS: Need to demonstrate the level of effect on the key features of these designations.	
		Sensitive properties: Need to demonstrate the level of effect on the amenity, health & safety and environment of nearby sensitive properties (schools).	
		River Wye SAC: An Appropriate Assessment is required to demonstrate <u>no</u> the likely significant effect(s) on the SAC. Development should <u>will be required to</u> demonstrate <u>at least</u> nutrient neutrality or betterment.	
		Widemarsh Brook and Yazor Brook: Need to demonstrate the level of effect on water quality and hydrology of the Yazor Brook.	

Mod. Ref.	Site Name and Policy	Key Development Criteria	Does the Proposed Main Modification Affect the HRA Conclusions Previously Reported in the Publication Draft HRA Report?
MM9.d.23	Westonhill Wood Delves Policy M5(1,a&b)	Airfield: Need to demonstrate the level of effect on the current and likely future operations of the nearby airfield. Ancient Woodland: Need to demonstrate the level of effect on the ancient woodland, leaving a buffer adequate to protect the designation. Archaeology and geodiversity: Need to demonstrate the potential for archaeological remains or geological features to be present on the site, through desk-based assessment and/or field evaluation as appropriate. Mitigation will include recording, protection or recovery of any assets. Dark Skies: Need to demonstrate that lighting will be kept to the minimum required to ensure safe working conditions on site. Green infrastructure: Operation and reclamation phases should deliver priorities of the Herefordshire Green Infrastructure Strategy, in particular those associated with District Strategy Corridor 7. Site design should deliver a net gain in biodiversity, providing enhancement for priority habitats, and incorporate key features of the landscape character. Ground water: Located on secondary aquifer of the Devonian. Need to demonstrate the potential risks to the water environment, including abstractions (public and private supply) wells and springs including drinking water. Housing: Need to demonstrate the level of effect on residential amenity at nearby properties. Heritage assets: Need to demonstrate the level of effect less than substantial harm on heritage asset(s) and their setting(s). Merbach Hill LWS, Benfield Park LWS and Westonhill Wood LWS: Need to demonstrate the level of effect on the key features of these designations. River Wye SAC: An Appropriate Assessment is required to demonstrate at least nutrient neutrality or betterment. River Wye SSSI: Need to demonstrate the level of effect on the key features of this designation. Site Access: Need to demonstrate that vehicles can continue to access and leave the site, to and from the public highway, safely.	Site ref. M20 – no change to HRA findings: The proposed Main Modification provides clarification regarding the need for development proposals at Westonhill Wood Delves to demonstrate at least nutrient neutrality within the River Wye SAC. However, it does not alter the previously identified HRA Screening and AA conclusions relating to this site allocation and Policy M5, indeed it is likely to help contribute to the mitigation of likely significant effects arising from changes in water quality, and therefore support the conclusion of no adverse effect on integrity on the River Wye SAC.

Appendix B

Representations on the Publication Draft HRA Report

This appendix presents the representations from Natural England, the Environment Agency and Natural Resources Wales on the Publication Draft MWLP and HRA Report and how they have been addressed.

B.1 Tables B.1 – B.3 set out the representations received on the Publication Draft Herefordshire MWLP and accompanying 2020 HRA Report. The section/policy/paragraph of the MWLP and/or HRA Report that each comment relates to is shown in the middle column. The final column sets out LUC's response to each comment, and whether it has been addressed in the Council's Schedule of Proposed Modifications and/or this HRA Addendum.

Natural England

Table B.1: Responses to Natural England (NE)'s comments on the Herefordshire MWLP Publication HRA Report (2020)

NE Comment (from consultation letter dated 25/05/2021)	Relevant Paragraph of HRA Report/MWLP	LUC Response
Page 1: However there are concerns regarding the Habitat Regulations Assessment, and we are unable to agree a conclusion of no adverse effect on integrity. Natural England advises that further clarification is required of certain policies and allocations. Amending the wording of the HRA report, as highlighted below, may help to clarify the proposed mitigation. We therefore provide advice with regard to the site allocations and the plan's compliance with the Conservation of Habitats and Species Amendment (EU Exit) Regulations 2019.	Whole HRA Report/Chapter 6 Conclusions. Policies within MWLP.	NE's overarching concern is noted. Some of NE's comments relate more to the wording of certain policies and allocations in the MWLP itself (as noted in the rows below). These were discussed at a meeting between NE, Herefordshire Council and their consultants preparing the MWLP (Hendeca) and the HRA consultants (LUC) in July 2021. Herefordshire Council and Hendeca have considered what proposed changes they could make to the relevant policies/site allocations and these have now been set out in the Schedule of Proposed Modifications. LUC has considered the proposed Main Modifications and whether they change the HRA conclusions previously identified in the Publication HRA Report, and the findings are set out in this HRA Addendum (see Appendix A).
Page 1: Agricultural Waste, paragraph 7.2.27 and 7.2.28: We offer support to the references made here. This includes a waste management method statement to be submitted with all applications for livestock unit(s) on agricultural holdings, and the agricultural sector contributing to achieving at least nutrient neutrality. "It is important that the agricultural sector makes a real contribution to achieving at least nutrient neutrality, if not betterment, in the River Wye SAC." This reference is welcomed and encouraged.	Paragraph 7.2.27 and 7.2.28 of the MWLP.	NE support noted for this phrasing, i.e., "at least nutrient neutrality". Herefordshire Council/Hendeca agreed to make consistent use of this phrasing in the supporting text and policy wording as necessary within the MWLP, and this is shown in the Schedule of Proposed Modifications (see MM7.g, h, j, k, as well as relevant MMs for the Key Development Criteria in Table 2). Also, the definition of nutrient neutrality from the Preparing the Publication Draft MWLP, paragraph 3.1.14 has been included in the MWLP Glossary through Section 10 of the Schedule of Proposed Modifications.
Page 2: Policy W3 – Agricultural Waste Management: "Anaerobic digestion will be supported where its use is to manage only natural wastes generated primarily on the agricultural unit within which it is located." Natural England generally supports this point.	Policy W3 (Agricultural Waste Management).	NE comment noted, but after discussion with NE, Herefordshire Council/Hendeca has modified Policy W3 and its supporting text through MM7.g, h, k and j. As shown in Table A.1 of this HRA Addendum, the proposed modifications to Policy W3 and its supporting text provide clarification regarding the need for development proposals to demonstrate at least nutrient neutrality within the River Wye SAC. However, the proposed modifications do not alter the

NE Comment (from consultation letter dated 25/05/2021)	Relevant Paragraph of HRA Report/MWLP	LUC Response
Proposals in the River Lugg catchment do need to demonstrate nutrient neutrality. Therefore, any proposals for anaerobic digestors that fall within the River Lugg catchment will need to consider the following: "If an application for a new or extension to an existing anaerobic digestor plant is within the catchment of the River Lugg, your authority should consider the risk that the development will indirectly increase the amount of phosphates entering the designated site. If an increase in the catchment's phosphate loads is considered likely then the implications of the proposals, along with any measures that may be implemented to alleviate that risk, should also be considered through an appropriate assessment."		previously identified HRA Screening and AA conclusions relating to Policy W3, indeed they are likely to help contribute to the mitigation of likely significant effects arising from changes in water quality, and therefore support the HRA's conclusion of no adverse effect on integrity on the River Wye SAC. However, LUC has prepared an update of paragraphs 5.19 to 5.33 of the HRA Report (presented in Chapter 3 of this HRA Addendum), to reflect the MWLP wording as proposed to be modified.
Page 2: Policy W4 – Waste water management: It is noted that this policy makes reference to nutrient neutrality. We would support and encourage proposals that contribute to nutrient neutrality as a form of mitigation. However, we do question the term 'betterment', and ask for further clarity on this statement.	Policy W4 (Waste water management).	As above, Herefordshire Council/Hendeca agreed to make consistent use of the phrasing "at least nutrient neutrality" in the supporting text and policy wording as necessary within the MWLP, and this is shown in the Schedule of Proposed Modifications (see MM7.g, h, j, k, as well as relevant MMs for the Key Development Criteria in Table 2). Also, the definition of nutrient neutrality from the Preparing the Publication Draft MWLP, paragraph 3.1.14 has been included in the MWLP Glossary through Section 10 of the Schedule of Proposed Modifications. As shown in Table A.1 of this HRA Addendum, the proposed modification to Policy W4 provides clarification regarding the need for development proposals to demonstrate at least nutrient neutrality within the River Wye SAC. However, the proposed modification does not alter the previously identified HRA Screening and AA conclusions relating to policy W4, indeed it is likely to help contribute to the mitigation of likely significant effects arising from changes in water quality, and therefore support the HRA's conclusion of no adverse effect on integrity on the River Wye SAC.
		However, LUC has prepared an update of paragraphs 5.19 to 5.33 of the HRA Report (presented in Chapter 3 of this HRA Addendum), to reflect the MWLP wording as proposed to be modified.
Page 2:	HRA Report paragraph 5.21.	Paragraph 5.21 of the December 2020 HRA Report clearly states 'However, due to the phosphate targets still being exceeded, and the implications of the Dutch Nitrogen case (that there must be certainty that mitigation and avoidance

NE Comment (from consultation letter dated 25/05/2021)	Relevant Paragraph of HRA Report/MWLP	LUC Response
The HRA relies on the Nutrient Management Plan (NMP), as strategic mitigation. Clarification is sought here. We accept that the NMP and the information within it can be referred to and used as part of the evidence base. However, following the clarification given by the <i>Coöperatie Mobilisation for the Environment</i> cases (Dutch Nitrogen case), the NMP cannot be relied upon as strategic mitigation because it does not have enough certainty to conclude that there are no adverse effect on integrity. The Dutch case applies to designated sites already in unfavourable condition due to nutrient enrichment. In this case that is the River Lugg part of the River Wye SAC. The Dutch case clarified that an Appropriate Assessment (AA) may not take into account the benefits of conservation, preventative or other measures if the expected benefits of those measures are not "certain" at the time of the assessment. Because the NMP does not have enough certainty that actions will be delivered and targets achieved, it cannot be relied upon as strategic mitigation. The Dutch case also clarified that where the conservation status of a natural habitat is unfavourable, the possibility of authorising activities which may subsequently affect the ecological situation of the sites concerned is 'necessarily limited'.		measures will actually be achieved), the NMP has been superseded by new documents published by the Council in March 2020 (Position Statement and FAQs on Development in the River Lugg Catchment Area, and a Guidance Note and Checklist relating to HRA and planning applications). It is noted that since production of the December 2020 HRA Report there has been an updated Position Statement ²¹ (April 2021), and this has now been referred to in the Schedule of Proposed Modifications (see MM7.g). As shown in Table A.1 of this HRA Addendum, the proposed modifications to policies W3 and W4 and relevant supporting text provide clarification regarding the need for development proposals to demonstrate at least nutrient neutrality within the River Wye SAC. However, the proposed modifications do not alter the previously identified HRA Screening and AA conclusions relating to policy W3 and W4, indeed they are likely to help contribute to the mitigation of likely significant effects arising from changes in water quality, and therefore support the HRA's conclusion of no adverse effect on integrity on the River Wye SAC. However, LUC has prepared an update of paragraphs 5.19 to 5.33 of the HRA Report (presented in Chapter 3 of this HRA Addendum), to reflect the updated River Lugg Position Statement and the MWLP wording as proposed to be modified.
Pages 2-3: The phrase 'nutrient neutral or betterment' has been used within the HRA. It is noted that this is used as part of Herefordshire Council's position statement; "In the interim –	HRA Report paragaphs 5.25, 5.26, 5.29 and 5.30.	Betterment has been clearly defined in the HRA Report: Paragraph 5.25 provides the definitions of nutrient neutrality and betterment, which clearly states that betterment is 'an improvement in the current situation regarding phosphate impacts, above and beyond neutrality'.
On Natural England's advice, there remains potential for a positive appropriate assessment, where it can be demonstrated that development is nutrient neutral or would lead to betterment to enable development to proceed.		As above, Herefordshire Council/Hendeca agreed to make consistent use of the phrasing "at least nutrient neutrality" in the supporting text and policy wording as necessary within the MWLP, and this is shown in the Schedule of Proposed Modifications (see MM7.g, h, j, k, as well as relevant MMs for the Key Development Criteria in Table 2).

²¹ Herefordshire Council (2021) Position Statement – Development in the River Lugg Catchment Area April 2021 An Update [online]. Available at: https://www.herefordshire.gov.uk/downloads/file/22149/position-statement-update-april-2021

Representation on the Publication Draft HRA Report

NE Comment (from consultation letter dated 25/05/2021)	Relevant Paragraph of HRA Report/MWLP	LUC Response
Proposals will need to provide appropriate evidence of avoidance/mitigation measures. (Refer to Stage 2 of the Interim Plan for guidance)."		Also, the definition of nutrient neutrality from the Preparing the Publication Draft MWLP, paragraph 3.1.14 has been included in the MWLP Glossary through Section 10 of the Schedule of Proposed Modifications.
The term betterment does not provide any certainty that proposals will be nutrient neutral. It is assumed that betterment would result in a proposal being an improvement compared to the current situation, however in some cases such an improvement will not be sufficient to demonstrate nutrient neutrality, meaning such cases will still result in an increase of phosphate. Within the Lugg catchment, this would be unacceptable, and mitigation measures to demonstrate nutrient neutrality would be required.		As shown in Table A.1 of this HRA Addendum, the proposed modifications to policies W3 and W4 and relevant supporting text provide clarification regarding the need for development proposals to demonstrate at least nutrient neutrality within the River Wye SAC (with no reference now to betterment). However, the proposed modifications do not alter the previously identified HRA Screening and AA conclusions relating to policy W3 and W4, indeed they are likely to help contribute to the mitigation of likely significant effects arising from changes in water quality, and therefore support the HRA's conclusion of no adverse effect on integrity on the River Wye SAC.
		However, LUC has prepared an update of paragraphs 5.19 to 5.33 of the HRA Report (presented in Chapter 3 of this HRA Addendum), to reflect the wording as proposed to be modified.
Page 3: It is noted that Nutrient Neutrality has also been mentioned as mitigation for agriculture.	HRA Report paragraph 5.29.	The HRA Report quotes policy W3 at paragraph 5.29. However, paragraph 5.21 of the HRA Report does recognise that the NN calculator only relates to housing or commercial development that will result in overnight stays.
The Nutrient Neutrality (NN) calculator that Herefordshire Council have produced is for housing. However, any agricultural planning applications that would increase Phosphate do also need to offset that, i.e. be NN. Further work		Herefordshire Council has advised that the Council has commissioned the preparation of a Supplementary Planning Document to look at impacts of agricultural applications, and propose a bespoke nutrient neutrality calculation.
is required to fully understand this.		As above, Herefordshire Council/Hendeca agreed to make consistent use of the phrasing "at least nutrient neutrality" in the supporting text and policy wording for policy W3, and this is shown in the Schedule of Proposed Modifications (see MM7.g, h, j, k).
		LUC has prepared an update of paragraphs 5.19 to 5.33 of the HRA Report (presented in Chapter 3 of this HRA Addendum), which now make reference to the fact that the agricultural planning applicants need to demonstrate nutrient neutrality, using their own calculations and guidance from the forthcoming SPD.

NE Comment (from consultation letter dated 25/05/2021)	Relevant Paragraph of HRA Report/MWLP	LUC Response
Page 3: Policy W3 – Agricultural Waste Management:	HRA Report paragraph	All references to the River Wye SAC within the December 2020 HRA Report
We are unable to agree with the following statement;	5.29 quotes the italicised text, which is from Policy W3.	incorporate the River Lugg component of the River Wye, as it is shown on the SAC boundary on Magic map.
'All development proposals will be required to demonstrate delivery of a net reduction in nutrient discharges contributing to nutrient neutrality, or betterment, within the River Wye SAC.' Further clarity is required, to explain whether this statement includes proposals		However, Herefordshire Council/Hendeca have agreed to make consistent use of the phrasing "at least nutrient neutrality" in the supporting text and policy wording for policy W3, and this is shown in the Schedule of Proposed Modifications (see MM7.g, h, j, k). This applies to the whole of the River Wye
which fall within the Lugg catchment, a component of the River Wye SAC. We		SAC catchment as clarified in MM7.h
dvise that betterment would not be adequate in the River Lugg part of the SAC and nutrient neutrality should be required.		As shown in Table A.1 of this HRA Addendum, the proposed modifications to Policy W3 and its supporting text provide clarification regarding the need for development proposals to demonstrate at least nutrient neutrality within the River Wye SAC (with no reference now to betterment). However, the proposed modifications do not alter the previously identified HRA Screening and AA conclusions relating to policy W3 and W4, indeed they are likely to help contribute to the mitigation of likely significant effects arising from changes in water quality, and therefore support the HRA's conclusion of no adverse effect on integrity on the River Wye SAC.
		However, LUC has prepared an update of paragraphs 5.19 to 5.33 of the HRA Report (presented in Chapter 3 of this HRA Addendum), to reflect the MWLP wording as proposed to be modified.
Page 3: Paragraph 5.20:	This part of NE's letter is	All references to the River Wye SAC within the HRA Report incorporate the
The plan should clarify which parts of the River Wye SAC are failing. The River Lugg, which is part of the River Wye SAC, has not been mentioned.	referring to the HRA Report paragraph 5.20, not the MWLP.	River Lugg component of the River Wye, as it is shown on the SAC boundary on Magic map.
We agree with the statement that phosphate discharge into the river is important. The River Lugg is already exceeding its targets for phosphate. However other pollutants which may end up in the river also need mitigating against. We would still expect mitigation for example, against surface runoff.		LUC has prepared an update of paragraphs 5.19 to 5.33 of the HRA Report (presented in Chapter 3 of this HRA Addendum), and reference to the River Lugg part of the River Wye SAC being the part that is failing the conservation objectives due to exceedance of phosphate targets has been added to paragraph 5.20 of the HRA Report.
		The HRA Report ruled out other pollutants in terms of having a likely significant effect on the River Wye SAC as stated in paragraph 5.20: 'Therefore, while there may be some occasional release of other pollutants through surface water run-off at minerals and waste sites (e.g. oil or fuels from machinery and

NE Comment (from consultation letter dated 25/05/2021)	Relevant Paragraph of HRA Report/MWLP	LUC Response
		vehicles), the types of pollutants are less likely than phosphate to significantly affect water quality in the River Wye SAC.'
		The HRA Report already refers in paragraphs 5.25-5.28 to the mitigation provided by the application of Core Strategy policies SS6; LD1; LD2; LD3; and LD4 relating to Environmental Quality and Local Distinctiveness, which include general measures to mitigate water pollution such as cleaning of lorry wheels before they exit the site and good maintenance of bunds and stockpiles, as well as locating plant, machinery and haulage routes away from sensitive receptors. This is considered sufficient to avoid all but very occasional impacts from sediments/oil carried in surface run-off.
Page 3: Paragraph 5.21: Reference is made to the Nutrient Management Plan. Clarification is required	HRA Report paragraph 5.21.	All references to the River Wye SAC within the December 2020 HRA Report incorporate the River Lugg component of the River Wye, as it is shown on the SAC boundary on Magic map.
on whether this is referring to the River Wye or River Lugg. The latest advice from Herefordshire Council is outlined within their April 2021 position statement.		It is noted that since production of the December 2020 HRA Report there has been an updated Position Statement (April 2021), and this has now been referred to in the Schedule of Proposed Modifications (see MM7.g).
		As shown in Table A.1 of this HRA Addendum, the proposed modifications to policies W3 and W4 and relevant supporting text provide clarification regarding the need for development proposals to demonstrate at least nutrient neutrality within the River Wye SAC (with no reference now to betterment). However, the proposed modifications do not alter the previously identified HRA Screening and AA conclusions relating to policy W3 and W4, indeed they are likely to help contribute to the mitigation of likely significant effects arising from changes in water quality, and therefore support the HRA's conclusion of no adverse effect on integrity on the River Wye SAC.
		However, LUC has prepared an update of paragraphs 5.19 to 5.33 of the HRA Report (presented in Chapter 3 of this HRA Addendum), to reflect the MWLP wording as proposed to be modified.
Page 3: Paragraph 5.22: Further explanation is required here. The conclusion states,	HRA Report paragraph 5.21.	Paragraphs 5.19 to 5.24 in the December 2020 HRA Report are not the conclusion of the AA; they set out a discussion of the likely significant effects identified and whether they might result in an adverse effect on integrity.

Appendix B

Representation on the Publication Draft HRA Report

NE Comment (from consultation letter dated 25/05/2021)	Relevant Paragraph of HRA Report/MWLP	LUC Response
"Therefore, while the above policies and site allocations could result in some discharges/run-off to the River Wye, these are unlikely to adversely affect the integrity of the SAC because any discharges or run-off will not be high in phosphates."		Appendix B of the December 2020 HRA Report provides the detailed assessment of likely significant effects and identifies which MWLP policies and site allocations could result in water pollution to the River Wye SAC (including the River Lugg catchment – see M05 Wellington Quarry on page B-10 and Area of Search C on page B-20 for example).
We are unable to agree with reasoning of ruling out adverse effects on integrity. There is no mention of River Lugg SAC, which is already in unfavourable condition and failing its conservation objective for phosphate. Any increase of phosphate, however small, cannot be permitted, as it would		Paragraphs 5.25 to 5.33 then set out the mitigation provided in the MWLP relating to those effects, with the overall conclusion taking mitigation into account stated in the green box after paragraph 5.33.
result in a HRA conclusion of adverse effects on integrity. It is agreed that restoration to agriculture could result in phosphate discharge. However there does not appear to be any mention of any mitigation. We would		All references to the River Wye SAC within the HRA Report incorporate the River Lugg component of the River Wye, as it is shown on the SAC boundary on Magic map.
recommend consideration of restoration to recreational use and/or green infrastructure.		There is no River Lugg SAC.
		However, it is agreed that paragraph 5.22 could have been clearer by saying:
		'Therefore, while the above policies and site allocations could result in some discharges/run-off to the River Wye <u>and River Lugg</u> , these are unlikely to adversely affect the integrity of the <u>River Wye</u> SAC because any discharges or run-off will not be high in phosphates.'
		However, we stand by the conclusion, which takes into account the mitigation set out in paragraph 5.25 and 5.26, i.e.
		'The risks of phosphate discharges relating to stripping away topsoil and subsoil; extracting the mineral; and restoration can be avoided by the use of conditions requiring development proposals to demonstrate how 'nutrient neutrality' (i.e. a project would result in no net increase in the phosphate load being discharged to the River Wye SAC; this could be after controls at source, reduction by treatment, and/or offsetting measures) would be achieved.'
		Note that the part of paragraph 5.25 that stated 'or 'betterment' (i.e. an improvement in the current situation regarding phosphate impacts, above and beyond neutrality)' has been deleted in the update of paragraphs 5.19 to 5.33 of the HRA Report (presented in Chapter 3 of this HRA Addendum).
		Paragraph 5.26 notes that this requirement has been added into the Key Development Criteria for all three sand and gravel allocations in Policies M3,

Representation on the Publication Draft HRA Report

NE Comment (from consultation letter dated 25/05/2021)	Relevant Paragraph of HRA Report/MWLP	LUC Response
		M4 and M5, all but one of the waste allocations in policy W5 (2), all of the waste allocations in policy W5 (3) and all of the allocations in policy W6.
Page 4: Paragraph 5.26: The wording of this paragraph needs to be improved. Nutrient neutrality has	HRA Report paragraph 5.26.	All references to the River Wye SAC within the HRA Report incorporate the River Lugg component of the River Wye, as it is shown on the SAC boundary on Magic map.
been mentioned, but it is not clear whether this is in relation to the River Wye or Lugg. The term betterment implies that a phosphate increase could still be allowed. Following the Dutch Nitrogen Judgment, a plan or project that resulted in additional discharge of phosphate to the River Lugg part of the River Wye SAC would have an adverse effect on integrity.		Paragraph 5.26 states 'The requirement for developments to achieve nutrient neutrality or betterment in relation to the River Wye SAC has been added to the Publication Draft MWLP within the Key Development Criteria for' [the allocations listed in row above].
		Herefordshire Council/Hendeca have agreed to make consistent use of the phrasing "at least nutrient neutrality" in the relevant Key Development Criteria, and this is shown in the Schedule of Proposed Modifications (see Table 2). This applies to the whole of the River Wye SAC catchment as clarified in MM7.h.
		As shown in Table A.1 of this HRA Addendum, the proposed modifications to the Key Development Criteria provide clarification regarding the need for development proposals to demonstrate at least nutrient neutrality within the River Wye SAC (with no reference now to betterment). However, the proposed modifications do not alter the previously identified HRA Screening and AA conclusions relating to policies W3 and W4 and relevant Key Development Criteria, indeed they are likely to help contribute to the mitigation of likely significant effects arising from changes in water quality, and therefore support the HRA's conclusion of no adverse effect on integrity on the River Wye SAC.
		LUC has prepared an update of paragraphs 5.19 to 5.33 of the HRA Report (presented in Chapter 3 of this HRA Addendum), to reflect the MWLP wording as proposed to be modified.
Page 4: Paragraph 5.29: Does this include both the River Wye SAC and River Lugg SAC?	HRA Report paragraph 5.29, but it is quoting from policy W3.	All references to the River Wye SAC within the HRA Report incorporate the River Lugg component of the River Wye, as it is shown on the SAC boundary on Magic map. There is no River Lugg SAC.

NE Comment (from consultation letter dated 25/05/2021)	Relevant Paragraph of HRA Report/MWLP	LUC Response
		Paragraphs 3.3.33 to 3.3.38 of the MWLP explain that part of the River Wye SAC designation includes the River Lugg, that the River Lugg is also a SSSI (which extends further north than the SAC), and that the River Lugg catchment is important in terms of the agricultural activity that is leading to phosphate pollution within the River Wye and its tributaries.
		Herefordshire Council/Hendeca have clarified in the Schedule of Proposed Modifications (MM7.h) that the demonstration of nutrient neutrality applies to the whole of the River Wye SAC catchment.
Page 4: Paragraph 5.30: Allocations M05 and W45 are both located within the River Lugg catchment.	HRA Report paragraph 5.30.	Unclear why paragraph 5.30 is being referred to in NE's letter, as paragraph 5.30 explains the mitigation added to policy W4.
Clarification is required on what mitigation has been proposed.		However, allocations M05 (Wellington Quarry sand and gravel) and W45 (Wellington Quarry inert waste disposal) were screened in as having likely significant effects due to their location in the River Lugg catchment (see Appendix B of the 2020 HRA Report).
		The mitigation relied upon is set out in paragraphs 5.25-5.28, i.e. the use of conditions relating to nutrient neutrality or betterment, as required by the Key Development Criteria for Wellington Quarry in the MWLP, plus the application of Core Strategy policies SS6; LD1; LD2; LD3; and LD4 relating to Environmental Quality and Local Distinctiveness, including general measures to mitigate water pollution such as cleaning of lorry wheels before they exit the site and good maintenance of bunds and stockpiles, as well as locating plant, machinery and haulage routes away from sensitive receptors.
		Herefordshire Council/Hendeca have clarified in the Schedule of Proposed Modifications (in a number of proposed Main Modifications, see Table 1) that the Key Development Criteria are recognised as an element of policy under which each site is allocated.
Paragraph 5.33: In-combination - Multiple quarries and waste facility sites could be impacting on both the River Wye and River Lugg. Further explanation needed to explain how in-combination effects has been ruled out.	HRA Report paragraph 5.33.	The HRA Report assumes through the discussion set out in in paragraphs 5.25-5.28, that there are sufficient avoidance/mitigation measures in the MWLP to avoid any increases in water pollution (sediments, oils or phosphates) arising from new minerals and waste proposals coming forward (if the mitigation measures required through Core Strategy policies SS6; LD1; LD2; LD3; and LD4, as well as nutrient neutrality or indeed betterment are achieved).

NE Comment (from consultation letter dated 25/05/2021)	Relevant Paragraph of HRA Report/MWLP	LUC Response
		Therefore, the MWLP is considered unlikely to have any effect provided mitigation is achieved, and there is no need to consider the potential for incombination effects with other plans or projects.
Paragraphs 5.45 – 5.48: Noise and light disturbance have been mentioned as potential impacts. However, it is not clear whether any mitigation has been proposed. Further thought and explanation is required here, as other impacts from proposed works could impact on bats and therefore further mitigation may need to be considered.	HRA Report paragraphs 5.45 to 5.48.	Paragraphs 5.45 to 5.48 set out a discussion of the likely significant effects identified at screening in relation to

NE Comment (from consultation letter dated 25/05/2021)	Relevant Paragraph of HRA Report/MWLP	LUC Response
		"An AA is required to demonstrate the likely significant effects on the SAC. Need to demonstrate how habitat severance for horseshoe bats will be prevented, which may require the periphery woodland to be retained."
		This part of the key development criteria, which is in relation to Callow Delve should be reworded to state:
		"An AA is required to demonstrate the <u>re will be no adverse</u> effects on the <u>integrity of the</u> SAC. Need to demonstrate how habitat severance for horseshoe bats will be prevented, which may require the periphery woodland to be retained."
		Given the omission of consideration of noise and light impacts for this allocation in the HRA (see row above), it may also be prudent to add to the KDC for Wye Valley Woodlands SAC and Wye Valley & Forest of Dean Bat Sites SAC:
		"Need to demonstrate how noise and light impacts on horseshoe bats will be avoided."

Environment Agency

Table B.2: Responses to Environment Agency (EA)'s comments on the Herefordshire MWLP Publication HRA Report (2020)

EA Comment (from letter dated 24/05/2021)	Relevant Paragraph of HRA Report/MWLP	LUC Response
Policy W3 and W4: We acknowledge your references to nutrient neutrality and management, your aim to cover a variety of aspects including agricultural, point source water quality and waste related elements. Requiring assessment of and delivering some deliverable options would help with water protection, and effective waste management should reduce the amount of nutrients and pollutants released to waterbodies.	Policy W3 and W4 in MWLP.	Noted, no change required for HRA.

EA Comment (from letter dated 24/05/2021)	Relevant Paragraph of HRA Report/MWLP	LUC Response
Policy W3:	Policy W3 in MWLP.	Noted, no change required for HRA.
The plan is recommending that manure management plans (MMPs) should be submitted with all applications. We would support your suggestion for a MMP (or assessment) to be included at the planning stage to cover this issue and ensure the land use/proposal is acceptable.		
Part 'a' and 'b' of Policy W3:	Policy W3 in MWLP.	Noted, definitions and suggestions to be considered by Herefordshire
The terms "natural" and "non-natural" waste, are not terms that are widely used by us in our waste regulation and definition of waste. The policy is also not prescriptive about how these natural and non-natural wastes will be "appropriately managed". Some explanation and detail could be provided to make the policy more robust and effective.		Council/Hendeca. No change required for HRA, but any changes to the MWLP have been considered in this HRA Addendum for the Schedule of Proposed Modifications.
We note that you refer to "Natural wastes appropriate for anaerobic digestion (or other biological technologies) will be organic and likely to comprise: manures; poultry litter; spoilt crops; dirty water; and used bedding. Non-natural wastes are likely to comprise plastics, fencing materials, cleaning products and medicines that are likely to require treatment and/or disposal off-farm".		
We acknowledge that your policy would seek to require a waste management method statement to be submitted with all applications for livestock unit(s) on agricultural holdings. This could include intensive poultry and pig sites (some of which are subject to our regulation under EPR based on nature and an intensity stocking threshold). For information, as part of our intensive pig and poultry permit applications we don't require assessment or Manure Management Plans as part of the permit determination – but they are required for Environmental Permit holders after. For sites we regulate the 'control' of such management may come as part of the permit and/or other legislation such as the farming rules for water as you pick up in this section of the plan.		
We would question how the policy (part 'a' and 'b') would be implemented and what would be accepted as "appropriately managed". How would you check that wastes produced (if this includes manures which are not technically classed as a 'waste') are spread appropriately? Assuming within your definition		

EA Comment (from letter dated 24/05/2021)	Relevant Paragraph of HRA Report/MWLP	LUC Response
of 'natural waste' you include manure and poultry litter, we appreciate you would be seeking to manage and control these elements.		
Whether some clarity could be added to the text or you could consider a reference to and use of a supplementary guide to outline ways in which the method statement would operate with potential management options/wider solutions that could be explored. We understand section 106 legal agreements may be being utilised for manure management control, relating to poultry, elsewhere.		
Part 2 of Policy W3:	Policy W3 in MWLP.	Noted, information to be considered by Herefordshire Council/Hendeca. No
Anaerobic digestion will be supported where its use is to manage only natural wastes generated primarily on the agricultural unit within which it is located.		change required for HRA, but any changes to the MWLP have been considered in this HRA Addendum for the Schedule of Proposed Modifications.
This policy also uses the term 'natural' waste. We would highlight that there are lots of AD which take waste from elsewhere. This policy would not apply to a number of existing AD sites (unless an extension to perhaps of that nature) in the County.		
For information – our revised 'regulatory statement' for anaerobic digestion, helps define non waste feedstock. It states that 'If you use only energy crops or other non-waste materials as feedstock* for your anaerobic digestion plant, we will not require an EP for the activity'. Any associated combustion plant will be regulated by us if it exceeds the 50mw threshold. Our T24 Exemption allows farmers to anaerobically digest manure, slurry and vegetation on their farms to produce digestate that can be used as a fertiliser or soil conditioner, subject to restrictions at: https://www.gov.uk/waste-exemption-t24-anaerobic-digestion-at-premises-used-for-agriculture-and-burning-resulting-biogas .		
Our Briefing Note on 'Crop Residues used as feedstock*' (September 2014) confirms that Operators do not require an environmental permit or exemption either for the operation of the plant or for the beneficial use of the digestate produced , provided that they only take the following feedstocks:		
Purpose-grown crops, or		

EA Comment (from letter dated 24/05/2021)	Relevant Paragraph of HRA Report/MWLP	LUC Response
Crop residues that meet the above criteria, or		
A mixture of the above.		
Examples of crop residues are:		
Misshapen, bruised or undersized fruit and vegetables separated out, on the farm or in a pack-house, as being unsuitable for sale as food for consumption.		
Parts of fruit and vegetables such as leaves, roots and toppings that are removed as part of the processing for sale. This may be in a pack-house or at a farm.		
New AD sites or extensions to existing (to increase capacity) AD could impact upon diffuse water pollution through the production of maize and its potential contribution to Phosphorus or Nitrogen losses to the catchment.		
Part 3 of Policy W3:	Policy W3 in MWLP.	Noted, information to be considered by Herefordshire Council/Hendeca. No
All development proposals will be required to demonstrate delivery of a net reduction in nutrient discharges contributing to nutrient neutrality, or betterment, within the River Wye SAC.		change required for HRA, but any changes to the MWLP have been considered in this HRA Addendum for the Schedule of Proposed Modifications.
This statement could impact upon development where it cannot connect to mains foul sewer and demonstrate nutrient neutrality. With agricultural developments it might be difficult/impossible to be nutrient neutral. It may be that wider options could be provided locally or in the catchment and/or planning contributions (linked to what is being potentially progressed) could be sought to assist delivery of nutrient neutrality or betterment measures linked to the Nutrient Management Plan (NMP) e.g. environmental projects, improvements. What about minerals restoration to agriculture or other?		
We note that through this policy, there could be cases where you could refuse planning permission where development (associated works) do not contribute to achieving nutrient neutrality. This may lead to stalled applications and uncertainty around what and when development could come forward.		
Linked to this, where sites are proposed, including those 'waste sites' (policy W6) within this strategic plan, to connect to the mains foul sewer (preference)		

Appendix B

Representation on the Publication Draft HRA Report

EA Comment (from letter dated 24/05/2021)	Relevant Paragraph of HRA Report/MWLP	LUC Response
you should seek certainty that there is sufficient capacity and options to achieve nutrient neutrality are clearly evidenced and are deliverable. This is linked to a Water Cycle Study or similar evidence base to help confirm.		
Note: Government Guidance notes that adequate water and wastewater infrastructure is needed to support sustainable development. It states that sufficient detail should be provided to give clarity to all parties on if/when infrastructure upgrades will be provided, looking at the needs and costs (what and how much). The NPPG refers to "ensuring viability and deliverability – pursuing sustainable development requires careful attention to viability and costs in plan making and decision making". Plans should be "deliverable".		
In addition, we note that your 'development criteria' acknowledges, for all relevant site allocations (both minerals and waste), that "development should demonstrate nutrient neutrality or betterment". Leaving or deferring such matters to the planning application stage may not be appropriate, given the above. NPPG advises that you should ensure a reasonable prospect of delivery as part of effective plan making. You should justify and be confident/satisfied that your approach is reasonable and effective.		
We understand Integrated Wetlands are in the process of being implemented to help free up some growth in the Wye and Lugg catchment, as strategic mitigation for Phosphate reduction. This is linked to the NMP and a development contribution scheme. However, it is not clear what this will cover and what additional mitigation work is necessary to achieve the desired outcome, linked to growth in this local plan, options for agricultural management, and any update to the NMP. We understand the NMP is under review, the purpose of this is to provide an increased level of certainty around Phosphate reduction and timescales. The local plan is not clear on potential options/solutions relating to wastewater infrastructure for areas where there is a capacity issue of sorts, linked to Nutrient Neutrality, and not an identified solution perhaps. You should ensure mitigation is a viable and identified, deliverable action. In the absence of such there are potential concerns relating to the need for an effective, robust evidence base focusing on 'deliverability'. We would recommend that you ensure you have reasonable certainty, in consideration of what the current NMP has been able to deliver, to take forward the sites in this plan.		

EA Comment (from letter dated 24/05/2021)	Relevant Paragraph of HRA Report/MWLP	LUC Response
Linked to the above Policy W4: Wastewater management states that:	Policy W4 in MWLP.	Noted, information to be considered by Herefordshire Council/Hendeca. No
"Planning permission will be granted to the statutory water and sewerage undertaker to extend, upgrade, or make provision for new infrastructure necessary to ensure the statutory undertaker can continue to undertake its duty to supply potable water and treat foul flows. Works undertaken should contribute to achieving nutrient neutrality, or betterment, within the River Wye SAC. Wherever practical and economical, biogas should be recovered for use as an energy source and phosphorus should be recovered for beneficial uses."		change required for HRA, but any changes to the MWLP have been considered in this HRA Addendum for the Schedule of Proposed Modifications.
It is good to see that this recognises the effects of waste water discharges and seeks to ensure new, extended or upgraded wastewater works would need to contribute to achieving Nutrient Neutrality or betterment. It is just unclear what, when and how such measures would be necessary to inform any sites within this plan etc.		
We have commented on phosphorus recovery elsewhere in our 'waste' representations.		

Natural Resources Wales

Table B.3: Responses to Natural Resources Wales (NRW)'s comments on the Herefordshire MWLP Publication HRA Report (2020)

NRW Comment (from email dated 25/05/2021)	Relevant Paragraph of HRA Report/MWLP	LUC Response
Phosphate Sensitive Catchment – River Wye Special Area of Conservation (SAC) We were last consulted on this plan on 21/01/2019 where the plan was in its draft form. Since the previous consultation, the evidence and data available to inform the production of Local Plan documents has changed. On the 21st	General references to MWLP, SA and HRA Reports.	Noted, information also to be considered by Herefordshire Council/Hendeca. SA and HRA Addenda have referred to the quoted NRW planning position statement.

Appendix B

Representation on the Publication Draft HRA Report

NRW Comment (from email dated 25/05/2021)	Relevant Paragraph of HRA Report/MWLP	LUC Response
January 2021 we issued a planning position statement ²² regarding the phosphate levels from development in the riverine SAC catchments in Wales. We consider that this evidence needs to be a key consideration in the production of the LDP policies and allocated sites.		
Having reviewed the list of key local plans, programmes and environmental protection objectives outlined in the 'Publication Draft Herefordshire Minerals and Waste Local Plan Sustainability Appraisal', we note that this evidence has not been referenced. Notwithstanding advice provided by Natural England or the Environment Agency, we recommend that the compliance report data and evidence ²³ is taken into consideration in the sustainability appraisal and accompanying Habitats Regulations Assessment and be updated accordingly.		HRA Addendum will refer to the quoted NRW compliance report data and evidence.
We note the approach taken in the Minerals and Waste Local Plan (MWLP) regarding phosphates in the River Wye SAC as set out in Section 3 of the 'Herefordshire MWLP – Preparing the Publication Draft Plan' document dated January 2021 and welcome the concept of phosphorous recovery and the requirement of proposals to demonstrate nutrient neutrality, or betterment within the River Wye SAC. This is set out in Policy W3 Agricultural Waste Management and W4 Wastewater Management. We note there does not seem to be the same requirement set out in policy for minerals development within the plan.		Herefordshire Council/Hendeca to consider for other policies in MWLP.
Habitats Regulations Assessment:	HRA Report.	Noted.
We generally accept the conclusions and assessment carried out within the Herefordshire MWLP HRA. We do however have some concern and offer the following advice.		
We note that the Appropriate Assessment findings are concluded in Chapter 5 of the HRA document for the River Wye SAC and the Wye Valley and Forest of Dean Bat Sites SAC. The conclusion for each of the likely significant effects		

²² Natural Resources Wales (undated) Planning Position Statement [pdf]. Available at: https://cdn.cyfoethnaturiol.cymru/media/693023/planning-position-statement-river-sac-compliance-pdf?mode-pad&rd=132557132170000000.

compliance.pdf?mode=pad&rnd=132557132170000000

23 Natural Resources Wales (undated) Compliance Assessment of Welsh River SACs Against Phosphorus Targets [online]. Available at: https://naturalresources.wales/evidence-and-data/research-and-reports/water-reports/compliance-assessment-of-welsh-river-sacs-against-phosphorus-targets/?lang=en

NRW Comment (from email dated 25/05/2021)	Relevant Paragraph of HRA Report/MWLP	LUC Response
identified by the HRA is that provided that the mitigation measures and additional recommendations included in the publication draft of the MWLP are implemented successfully, adverse effects on the integrity of the SAC's will be avoided, either alone or in-combination.		
The recommended mitigation strategy is for the requirement of an Ecological Mitigation Plan to identify a number of site-specific measures where there is potential for operations to affect the River Wye SAC. It is considered that this in addition to 'Safeguards' provided within the MWLP is sufficient to avoid adverse effects on the integrity of the River Wye SAC.	Chapters 5 and 6 of the HRA Report.	Noted, no change required for HRA.
Safeguards or 'standard measures' are set out in paragraph 5.4.5 of the MWLP Publication draft, which are considered to be robust measures to ensure that proposed development does not cause an unacceptable adverse impact on either the environment or local communities. We recommend that reliance on an Ecological Mitigation Plan in addition to the safeguards may not result in HRAs carried out at the specific site level as each one comes forward or is reviewed that result in adequate protection of the River Wye SAC. To overcome this limitation it may be possible to provide outline needs of site specific HRAs and to consider what mechanisms are in place and/or available in order to provide the relevant information to inform the HRA process for the MWLP. Therefore, whilst we do not disagree that HRA for specific sites needs to be considered by development management, we raise concerns regarding safeguards in the interest of protecting the River Wye SAC in Wales at this plan stage. Further as the Competent Authority, we seek to remind you that you should be satisfied that beyond any reasonable scientific doubt that the safeguarding measures proposed as mitigation and avoidance measures are sufficient to inform the Appropriate Assessment of the MWLP at the submission stage.	Chapters 5 and 6 of the HRA Report.	Noted, no change required for HRA. The 2020 HRA Report does not solely rely on the Ecological Mitigation Plan for mitigation of effects on European sites. The 2020 HRA Report also relied on (and recommended) the requirement within the Key Development Criteria for relevant minerals and waste allocations to carry out site specific HRA.
Paragraph 5.22 of the HRA states that 'Mineral working proposals would not normally be considered as a source of phosphate, as they do not generate wastewater from residential occupancy and there is no mining of phosphate rock in Herefordshire. Therefore, while the above policies and site allocations could result in some discharges/run-off to the River Wye, these are unlikely to adversely affect the integrity of the SAC because any discharges or run-off will	HRA Report, paragraph 5.22.	The HRA Report for the MWLP does recognise that stripping and storage of topsoil and subsoils could also have an effect on integrity of the River Wye SAC. Paragraph 5.22 goes on to state: "However, the Preparing the Publication Draft MWLP document recognises that mineral working can result in a change in agricultural land, throughout the extraction process: stripping away topsoil and subsoil; extracting the mineral; and restoration. Restoration proposals

Appendix B

Representation on the Publication Draft HRA Report

NRW Comment (from email dated 25/05/2021)	Relevant Paragraph of HRA Report/MWLP	LUC Response
not be high in phosphates'. We do not agree with this statement and consider that discharges from mineral development considered alone and/or in combination may have phosphate implications that affect the integrity of the River Wye SAC. The MWLP Appropriate Assessment should recognise that		involving schemes that would draw in a lot of visitors to the area could also result in phosphate releases (from wastewater). Restoration to agriculture could also result in phosphate releases, if too much of the nutrient is added to the land."
stripping and storage of topsoil and subsoils if inadequately managed has the potential for adverse effects on the integrity of the River Wye SAC because organic matter laden run-off either alone or in-combination is not known for the plan. We consider that this an example issue of where measures can be identified at the MWLP stage to inform an Ecological Mitigation Plan or other form of safeguard can be identified and cascaded to a site specific HRA for securing via an appropriate planning control.		Paragraphs 5.25 to 5.33 then set out the mitigation provided in the MWLP relating to these effects, i.e. the use of conditions relating to nutrient neutrality or betterment, as required by the Key Development Criteria for Wellington Quarry in the MWLP, plus the application of Core Strategy policies SS6; LD1; LD2; LD3; and LD4 relating to Environmental Quality and Local Distinctiveness, including general measures to mitigate water pollution such as cleaning of lorry wheels before they exit the site and good maintenance of bunds and stockpiles, as well as locating plant, machinery and haulage routes away from sensitive receptors.
Wye Valley and Forest of Dean Bat Sites SAC We note the consideration of potential implications arising from the allocated site at Callow Delve in terms of potential loss of offsite but functionally linked habitat for horseshoe bats associated with the Wye Valley and Forest of Dean Bat Sites SAC.	HRA Report paragraphs 5.45 to 5.48.	Noted, no change required for HRA of MWLP.
We have considered the Appropriate Assessment of this allocation and the avoidance and mitigation measures outlined within the publication draft of the MWLP. We understand that the allocation may result in the loss of small areas of habitat and agree that a site-specific HRA should accompany any new proposal brought forward which demonstrates how adverse effects on horseshoe bats will be avoided. Given that the site is currently an active site and is to be taken forward as an allocation for further working, we are satisfied that beyond that this can be achieved; but advise that a review of any current HRA should be completed to ensure there are no localised effects that need to be identified and used to inform the MWLP and any future HRA at the site level.		

Appendix C

Natural England's advice on nutrient neutrality issued March 2022

Date: 16 March 2022

To: LPA Chief Executives & Heads of Planning,
County Council Chief Executives and Heads of Planning,
EA Area and National Team Directors,
Planning Inspectorate,
Natural Resources Wales (Cross border sites only) &
Secretary of State for Department for Levelling Up Housing & Communities (DLUHC)



BY EMAIL ONLY

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

T 0300 060 3900

Dear Sir / Madam

Advice for development proposals with the potential to affect water quality resulting in adverse nutrient impacts on habitats sites.

1.0 Summary

This letter sets out Natural England's advice for development proposals that have the potential to affect water quality in such a way that adverse nutrient impacts on designated habitats sites¹ cannot be ruled out.

It also provides an update to those Local Planning Authorities (LPAs) whose areas include catchments where Natural England has already advised on how to assess the nutrient impacts of new development and mitigate any adverse effects, including through application of the nutrient neutrality methodology. It includes:

- Supporting Information (Annex A) which summarises the key tools and guidance documents available and how to take account of certain issues in any Habitats Regulations Assessment (HRA)
- a national map showing the affected catchments (Annex B)
- a list of habitats sites in unfavourable condition due to nutrients, where new development may have an adverse effect by contributing additional nutrients and therefore where nutrient neutrality is a potential solution to enable development to proceed (Annex C)
- a national generic Nutrient Neutrality Methodology (attached in covering email with this letter)
- a nutrient assessment methodology decision tree (Annex D)
- a flow diagram of the HRA process (Annex E)
- guidance on thresholds for insignificant effects for phosphorus discharges to ground (Annex F)
- Natural England Area Team contacts for each habitats site and catchment (Annex G)
- Catchment Specific Nutrient Neutrality Calculators and associated Calculator Guidance (attached in covering email with this letter)
- Site specific catchment maps (attached in covering email with this letter)
- Site specific evidence documents (new catchments only attached in covering email with this letter)
- Nutrient Neutrality Principles (attached in covering email with this letter)

¹ Habitat sites are sites which are protected by the Habitats Regulations and includes Special Areas of Conservation (SAC) and Special Protection Areas (SPA). Any proposals that could affect them require a Habitats Regulations Assessment (HRA). Ramsar sites are also included as these are protected as a matter of government policy and also require a HRA where proposals may affect them.

 Nutrient Neutrality – A Summary Guide to Nutrient Neutrality (attached in covering email with this letter)

Natural England advises you, as the Competent Authority under the Habitats Regulations, to carefully consider the nutrients impacts of any new plans and projects (including new development proposals) on habitats sites and whether those impacts may have an adverse effect on the integrity of a habitats site that requires mitigation, including through nutrient neutrality.

This letter provides advice on the assessment of new plans and projects under Regulation 63 of the Habitats Regulations. The purpose of that assessment is to avoid adverse effects occurring on habitats sites as a result of the nutrients released by those plans and projects. This advice does not address the positive measures that will need to be implemented to reduce nutrient impacts from existing sources, such as existing developments, agriculture, and the treatment and disposal of wastewater. It proposes that nutrient neutrality might be an approach that planning authorities wish to explore.

This letter is being sent to the Environment Agency (EA) and all Heads of Planning and Chief Executives for the Local Planning Authorities (LPAs) which are affected by this advice as well as the following:

- The Planning Inspectorate as the Competent Authority for appeals and local plan examinations.
- Secretary of State for the Department of Levelling Up, Housing and Communities (DLUHC) as Competent Authority for called in decisions/appeals.
- County Councils where there is a 2-tier authority.
- Natural Resources Wales (for cross border sites).

NE will also be writing to Ofwat and water companies to inform them of our advice.

2.0 Background

In freshwater habitats and estuaries, poor water quality due to nutrient enrichment from elevated nitrogen and phosphorus levels is one of the primary reasons for habitats sites being in unfavourable condition. Excessive levels of nutrients can cause the rapid growth of certain plants through the process of eutrophication. The effects of this look different depending on the habitat, however in each case, there is a loss of biodiversity, leading to sites being in 'unfavourable condition'. To achieve the necessary improvements in water quality, it is becoming increasingly evident that in many cases substantial reductions in nutrients are needed. In addition, for habitats sites that are unfavourable due to nutrients, and where there is considerable development pressure, mitigation solutions are likely to be needed to enable new development to proceed without causing further harm.

In light of this serious nutrient issue, Natural England has recently reviewed its advice on the impact of nutrients on habitats sites which are already in unfavourable condition. Natural England is now advising that there is a risk of significant effects in more cases where habitats sites are in unfavourable condition due to exceeded nutrient thresholds. More plans and projects are therefore likely to proceed to appropriate assessment.

The principles underpinning HRAs are well established². At the screening stage, plans and projects should only be granted consent where it is possible to exclude, on the basis of objective information, that the plan or project will have significant effects on the sites concerned. Where it is not possible to rule out likely significant effects, plans and projects should be subject to an appropriate assessment. That appropriate assessment must contain complete, precise and definitive findings which are capable of removing all reasonable scientific doubt as to the absence of adverse effects on the integrity of the site.

² See, amongst others Case C-127/02 *Waddenvereniging and Vogelsbeschermingvereniging* (Waddenzee); *R* (Champion) *v* North Norfolk DC [2015] EKSC 52 (Champion); C-323/17 People Over Wind, Peter Sweetman v Coillte Teoranta (People Over Wind); C-461/17 *Brian Holohan and Others v An Bord Pleanála* (Holohan); Joined Cases C-293/17 and C-294/17 *Coöperatie Mobilisation for the Environment UA and Others v College van gedeputeerde staten van Limburg and Other* (the Dutch Nitrogen cases).

Appropriate assessments should be made in light of the characteristics and specific environmental conditions of the habitats site. Where sites are already in unfavourable condition due to elevated nutrient levels, Natural England considers that competent authorities will need to carefully justify how further inputs from new plans or projects, either alone or in combination, will not adversely affect the integrity of the site in view of the conservation objectives. This should be assessed on a case-by-case basis through appropriate assessment of the effects of the plan or project. In Natural England's view, the circumstances in which a Competent Authority can allow such plans or projects may be limited. Developments that contribute water quality effects at habitats sites may not meet the no adverse effect on site integrity test without mitigation.

Mitigation through nutrient neutrality offers a potential solution. Nutrient neutrality is an approach which enables decision makers to assess and quantify mitigation requirements of new developments. It allows new developments to be approved with no net increase in nutrient loading within the catchments of the affected habitats site.

Where properly applied, Natural England considers that nutrient neutrality is an acceptable means of counterbalancing nutrient impacts from development to demonstrate no adverse effect on the integrity of habitats sites and we have provided guidance and tools to enable you to do this.

3.0 Natural England's Role and Advice

Natural England is the government's adviser for the natural environment in England. As a statutory consultee in the planning and environmental assessment processes we provide advice to planning authorities to support them in making plans and decisions that conserve and enhance the natural environment and contribute to sustainable development.

In reviewing our advice on water quality effects on habitats sites Natural England has:

- Undertaken an internal evidence review to identify an initial list of water dependent habitats sites
 (which includes their underpinning Sites of Special Scientific Interest) that are in unfavourable
 condition due to elevated nutrient levels (phosphorus or nitrogen or both). These sites are listed in
 Annex C. Development which will add nutrients to these sites may not meet the site integrity test
 without mitigation. This will need to be explored as part of the HRA. Nutrient neutrality is an approach
 which could be used as suitable mitigation for water quality impacts for development within the
 catchments of these sites (please refer to the Nutrient Neutrality A Summary Guide for an
 explanation of nutrient neutrality).
- Revised our internal guidance for planning, permitting and other HRA consultations which have the potential to have water quality and in particular nutrient effects on a habitats site.

This advice applies to the following types of habitats sites:

- Special Protection Areas (SPA) designated under the Habitat Regulations 2017.
- Special Areas of Conservation (SAC) designated under the Habitat Regulations 2017.
- Sites designated under the Ramsar Convention, which as a matter of national policy are afforded the same protection as if they were designated under the Habitat Regulations 2017.
- Sites identified or required as compensatory measures for adverse effects on SPAs, SACs and Ramsar sites.

A plan or project will be relevant and have the potential to affect the water quality of the designated site where:

• It creates a source of water pollution (e.g. discharge, surface run off, leaching to groundwater etc) of either a continuous or intermittent nature or has an impact on water quality (e.g. reduces dilution).

AND

• There is hydrological connectivity with the designated site i.e. it is within the relevant surface and/or groundwater catchment.

AND

• The designated sites interest features are sensitive to the water quality pollutant/impact from the plan/project.

For LPAs where Natural England has already provided advice on this matter: Natural England has already provided advice to some local authorities on how to address the impacts of development which has the potential to increase nutrient emissions and adversely affect the integrity of habitats protected sites. The sites subject to this previous advice are listed in Annex C Table 1. There is an agreed approach between Natural England and these authorities on applying nutrient neutrality as a mitigation measure to enable development to proceed without causing harm to the integrity of those habitats sites (which are in unfavourable condition due to elevated nutrient levels). We have advised that a likely significant effect from development that increases these nutrients cannot be ruled out³. In the absence of evidence to the contrary, our advice has been and continues to be that all new housing development proposals (including any other additional locally specific advice which has been issued), will need to consider, via an appropriate assessment, the impact of adding to the existing nutrients levels / loads where water quality targets are not being achieved for these habitats sites. Having carried out that assessment, permission for the plan or project may only be given if the assessment allows you to be certain that it will not have an adverse impact on the integrity of the site i.e. where no reasonable scientific doubt remains as to the absence of effects⁴.

We are writing to your authority now to keep you updated on the development of the approach including the availability of an updated package of tools and guidance. We recommend that your authority moves to using the updated generic Nutrient Neutrality Methodology (attached) and the updated catchment calculators (attached) in preference to existing methodologies whether produced by Natural England or your own authority. Your authority will be best placed to consider how it transitions to the new tools and guidance. Natural England recognises that for some existing catchments where nutrient neutrality is being implemented and mitigation is being actively progressed, authorities may need to consider the associated practicalities of moving to the new guidance whilst recognising their role as Competent Authority. The updated generic Nutrient Neutrality Methodology and associated catchment calculators incorporates new information and evidence, which is explained in Annex A.

For local authorities where this advice is new: Natural England advises you, as the Competent Authority under the Habitats Regulations, to fully consider the nutrients implications on the sites identified in Annex C Table 2 when determining relevant plans or projects and to secure appropriate mitigation measures (see Annex A, para 6 for mitigation options).

When considering a plan or project that may give rise to additional nutrients within the affected catchments, you should undertake a HRA. An Appropriate Assessment will be needed where a likely significant effect (alone or in-combination) cannot be ruled out, even where the proposal contains mitigation provisions. The need for an Appropriate Assessment of proposals that includes mitigation measures intended to avoid or reduce the harmful effects of a plan or project is well established in case law⁵. The Competent Authority should only grant permission if they have made certain at the time of Appropriate Assessment that the plan or project will not adversely affect the integrity of a habitats site i.e. where no reasonable scientific doubt remains as to the absence of effects⁶.

The application of nutrient neutrality as mitigation for water quality effects from development has been tested in *Wyatt v Fareham case*⁷. The High Court dismissed an application for judicial review that planning permission which applied nutrient neutrality as mitigation did not satisfy the Habitats

³ Natural England has agreed that for some sites it is appropriate to screen out insignificant discharges to ground of phosphorus where certain criteria are met. See Annex E for further details

⁴ Unless the further conditions in regs. 64 and 68 apply.

⁵ Gladman Developments Limited v S of S for Housing, Communities and Local Government and another [2019] EWHC 2001 (Admin)

⁶ Unless the further conditions in regs. 64 and 68 apply.

⁷ Wyatt v Fareham BC [2021] EWHC 1434 (Admin)

Regulations. The case has now been appealed. Where properly applied Natural England considers that 'nutrient neutrality' can be a robust way to mitigate nutrient impacts from development.

Your authority may wish to consider a nutrient neutrality approach as a potential solution to enable developments to proceed in the catchment(s) where an adverse effect on site integrity cannot be ruled out. For such an approach to be appropriate, the measures used to mitigate nutrients impacts should not compromise the ability to restore the designated site to favourable condition and achieve the conservation objectives (Further guidance is provided on what this means in practice in the Nutrient Neutrality Principles document, attached).

4.0 Plans and Projects Affected

Development

The Nutrient Neutrality Methodology enables a nutrient budget to be calculated for all types of development that would result in a net increase in population served by a wastewater system.

It covers all types of overnight accommodation including new homes, student accommodation, care homes, tourism attractions and tourist accommodation and permitted development⁸ (which gives rise to new overnight accommodation) under the Town and Country Planning (General Permitted Development) (England) Order 2015⁹.

For authorities where Natural England's advice is already being applied the development types affected remain as previously advised but are summarised in Table 1 Annex C.

This advice also applies to planning applications at the reserved matters approval stage of the planning application process, and to applications for grants of prior approval and/or certificates of lawfulness for a proposed use or operation.

Tourism attractions and tourism accommodation are included in the methodology as these land uses attract people into the catchment and generate additional wastewater and consequential nutrient loading on the designated sites. This includes self-service and serviced tourist accommodation such as hotels, guest houses, bed and breakfasts, self-catering holiday chalets and static caravan sites. Other types of proposal should be considered on their individual merits, for example conference facilities that generate overnight stays.

Other types of business or commercial development, not involving overnight accommodation, will generally not need to be included in the assessment unless they have other (non-sewerage) water quality implications. For the purposes of the Methodology, it is assumed that anyone living in the catchment also works and uses facilities in the catchment, and therefore wastewater generated can be calculated using the population increase from new homes and other accommodation. This removes the potential for double counting of human wastewater arising from different planning uses.

Permitting

Activities that require an environmental permit (such as waste operations, water discharge activities and groundwater activities) should be subject to an HRA where they are carried out within the catchment of a habitats site and there is a risk that they may affect water quality within that catchment.

Where a likely significant effect on the habitats site cannot be ruled out, they should be subject to an appropriate assessment. Mitigation will be required if an adverse effect on the integrity of the site cannot be ruled out, although depending on the type of permit being considered it may not be appropriate, to apply the standard nutrient neutrality methodology to such plans and projects. This would need to be considered on a case by case basis.

⁸ Please note the condition on permitted development relating to European sites is set out in Regulation 75 of the Habitats Regulations 2017. The statutory condition on permitted development in regulation 75 only applies the HRA procedure (via regulations 76 and 77) to statutory European Sites. It therefore only applies to Special Areas of Conservation (SAC's) and Special Protection Areas (SPA's) it does not apply to Ramsar sites, proposed SAC's or potential SPA's or to sites identified, or required, as compensatory measures for adverse effects on habitats sites.

⁹ Planning permission granted for permitted development is subject to regs. 75-78 of the Habitats Regulations.

Other Plans and Projects

Whilst nutrient neutrality is only currently being applied to development that would result in a net increase in population served by a wastewater system, the HRA requirements will apply to any plans or projects, including agricultural or industrial plans and projects that have the potential to release additional nitrogen and / or phosphorus into the system and that require an LPAs or the EA's consent, permission or approval.

A case-by-case approach will need to be adopted for these. Early discussions with Natural England via our chargeable Discretionary Advice Service (DAS) are recommended Natural England Discretionary Advice Service.

Competent Authorities must be cognisant of their duties under the Habitats Regulations when performing any of their functions. Competent Authorities may reasonably conclude that a HRA is required whenever they receive an application for any consent, approval, licence or permission for plans and projects not expressly referenced in this advice that may affect a habitats site. Natural England would welcome further discussion with you on any other types of plans and projects that you consider may have nutrients impacts.

5.0 Supporting Information

Annex A of this letter outlines the tools and guidance documents that will support LPAs in implementing this advice. There are also a suite of documents appended to this email including the generic Nutrient Neutrality Methodology, catchment specific calculators and associated guidance, catchment maps, Nutrient Neutrality Principles, Nutrient Neutrality – A Summary Guide and site specific evidence documents. We recommend reading the Nutrient Neutrality – A Summary Guide to help your understanding of what is a complex issue. Natural England has been working closely across government departments (Defra and DLUHC) in the preparation of this support package and will continue to do so in the development of longer term solutions.

The Planning Advisory Service will be hosting detailed teach ins and Q&A sessions on nutrient neutrality and we therefore strongly advise joining these as a first step to understanding the issue and as an opportunity to raise questions. Please follow the link for further details: Nutrient neutrality and the planning system | Local Government Association

Area Team contacts have been provided in Annex G as an initial point of contact for informal discussions. However, should you have any detailed or technical questions concerning this advice, please contact consultations@naturalengland.org.uk marked for the attention of the relevant Area Team. Please ensure that any formal consultations are also sent to consultations@naturalengland.org.uk.

Yours faithfully,

Melanie Hughes

Melane Hyle.

Sustainable Development Programme Director

ANNEX A: Supporting Information

This Annex summarises the key information and tools that are available to enable LPAs to implement Natural England's advice contained in this letter. It also explains how to take account of the following issues in any HRA:

- Habitats sites which are in unfavourable condition due to nutrients
- Use of permitted Wastewater Treatment Works (WwTW) headroom
- Summary of the updated generic Nutrient Neutrality Methodology
- Status of the National Nutrient Methodology and Calculators
- Mitigation options
- Forthcoming tools and guidance

1.0 Available Tools and Guidance

To help competent authorities take account of these water quality issues and develop strategic solutions, Natural England has provisionally developed the following tools and guidance:

- 1. A national generic Nutrient Neutrality Methodology (attached)
- 2. A national map showing the affected catchments (Annex B)
- 3. Table 1 listing the habitats sites that Natural England has previously advised are in unfavourable condition due to excessive nutrients and will require a HRA and where nutrient neutrality is a potential solution to enable development to proceed (Annex C).
- 4. Table 2 listing the additional habitats sites which are in unfavourable condition due to excessive nutrients which will require a HRA and where nutrient neutrality is a potential solution to enable development to proceed (Annex C).
- 5. A nutrient assessment methodology decision tree (Annex D)
- 6. A HRA Flow chart (Annex E)
- 7. Thresholds for insignificant levels of phosphorus discharges to ground (Annex F)
- 8. Area Team contacts for each habitats site and catchment (Annex G)
- 9. Catchment specific Nutrient Neutrality Calculators and associated Calculator Guidance
- 10. Detailed catchment specific maps (attached)
- 11. Evidence summary for each habitats site (new catchments only) including, brief site description, habitats site designated water dependent features, names of component SSSIs where relevant and summary of water quality data including targets and exceedances (attached).
- 12. Nutrient Neutrality Principles (attached)
- 13. Nutrient Neutrality A Summary Guide to Nutrient Neutrality

The Nutrient Neutrality Methodology is a national generic methodology which can be used for all affected catchments and sites (as listed in Annex C). The methodology can be used for both phosphorus and nitrogen. It provides a framework and a set of agreed "input values" to enable a nutrient budget to be determined for any development draining into a habitats site. These values are based on updated information and evidence; Natural England considers that they are suitably precautionary¹⁰ and address impacts in perpetuity to remove risks to site integrity beyond reasonable scientific doubt. The nutrient budget calculated should form part of the Appropriate Assessment (AA) of any HRA produced to address nutrient impacts on affected habitats sites.

The HRA Flow Chart summarises the key stages in the HRA process and the questions which need to be answered in relation to the habitats site and the proposed development at the screening and the appropriate assessment stages.

Guidance on Thresholds for Insignificant Effects from Phosphorus Only. This identifies the conditions which must be met to enable the effects of phosphorus, where it discharges to ground, to be considered as being insignificant. Where best available evidence indicates that these

¹⁰ Precautionary values are used for key variables and an additional buffer is applied in stage 4 of the methodology.

conditions are met, Natural England's advice is that a conclusion of no LSE, either alone or in combination, for phosphorus can be reached. Note this does not apply to nitrogen.

The Catchment Calculators have been developed for each designated habitats site and its catchment. They enable nutrient budgets to be calculated for phosphorus and nitrogen. The calculators will be in an Excel spreadsheet format. There will be an associated guidance document for each calculator.

Site Specific Catchment Maps show the extent of the affected catchment. Natural England advises that a HRA of water quality impacts on the habitats sites is undertaken for developments that are within, or discharge to, Wastewater Treatment Works (WwTW) that are within these catchments.

Evidence Summary for each habitats site. This document includes the site name and site details including reasons for designation, nutrient pressure (i.e. whether it is nitrogen, phosphorus or both), water quality evidence and information on the underpinning Sites of Special Scientific Interest (SSSIs) for the habitats site.

Nutrient Neutrality Principles. These set out the key principles which must be met for nutrient neutrality to be an effective mitigation measure which can be relied upon to enable development to proceed that would otherwise adversely affect the integrity of habitats sites.

2.0 Where a Habitats Site is Currently Unfavourable Due to Nutrients

Where a site is considered unfavourable due to exceeded nutrient levels and there is the possibility of further nutrient loading from a new plan or project, Natural England advises that Competent Authorities need to carefully consider the circumstances where plans or projects can be authorised. In many cases, an Appropriate Assessment (AA) is likely to be the appropriate stage to consider these matters more thoroughly.

Where the plan or project will (or it cannot be ascertained that it will not) contribute additional significant nutrients, alone or in-combination directly to, or upstream of, any unfavourable location which is important for maintaining or restoring the sensitive designated interest features, then Natural England advises that either there is a Likely Significant Effect (LSE) or a LSE cannot be ruled out and therefore, an Appropriate Assessment should be undertaken. We advise that as the Competent Authority you should consider the implications of relevant case law in any HRA. Annex F identifies "Thresholds for Insignificant Effects" for phosphorus discharges to ground.

3.0 Use of Permitted Wastewater Treatment Works (WwTW) Headroom

Headroom (flow or quality) in WwTW discharge permits has largely come about due to decisions being made by the Competent Authority based on taking a 'fair share' approach that relies on proportionality (i.e. relying on action by each sector to achieve favourable conservation status) and/or through water companies significantly over-performing on their permits. In many situations, headroom has been eroded as the habitats site water quality objectives have become more stringent, or there is new available information since the last AA of the permit.

Competent Authorities who wish to rely on the reasoning or conclusions in previous AA should consider the age of the AA, its robustness and whether evidence or circumstances have changed and therefore whether additional consideration is needed. Careful consideration will be needed where the habitats site feature is unfavourable due to elevated nutrient levels and plans or projects contribute further loading. Competent Authorities should consider:

- Any changes to the habitats site nutrient objectives or related ecological objectives since the AA was undertaken.
- Any new relevant information since the AA e.g. change to site condition, information on how measures relied on in the AA have performed.

- Whether the previous AA complies with current legal requirements as a result of any changes to Case law.
- Whether any measures taken into account in the AA can be still be safely relied on to deliver the anticipated effects so that no reasonable scientific doubt remains as to their efficacy and delivery. For example, if a decision on a permit was based on another sector (such as agriculture) also delivering reductions to enable the site to achieve the water quality objectives, those measures to be taken on other sectors should be sufficiently certain so that they can lawfully be considered in an AA.

The preferred approach is to have a strategic plan which considers what is required from all sources (e.g. Diffuse Water Pollution Plan /Nutrient Management Plan) based on the latest evidence, is sufficiently certain and can therefore be used to identify and enable the development of WwTW headroom that can be used for growth, which competent authorities can then rely on to inform their AA. However due to the difficulties with providing sufficient certainty in these plans this may not be possible in the short to medium term for some habitats sites and may remain a longer term aim.

4.0 Updated Nutrient Neutrality Methodology

This new methodology incorporates updated information as detailed below. For those authorities which are currently implementing nutrient neutrality Natural England recommends that they move to applying the updated methodology (attached) and the catchment calculators (attached) in preference to any existing methodologies whether produced by Natural England or your own authority.

- The Generic Methodology includes the latest version of Farmscoper (version 5) which includes more up to date values for the various variables. The updated approach also uses the actual outputs rather than averaged values from Farmscoper for detailed farm types broken down by rainfall, drainage and Nitrate Vulnerable Zones. The benefit of taking the detailed farm types approach is that it offers a more specific budget calculation for the actual nutrient losses from the development or mitigation land to be taken into account.
- The Generic Methodology covers all potential different situations on water usage that might occur across the full range of catchments.
- It provides a more consistent approach for dealing with onsite wastewater treatment systems.
- Pet waste is not considered in the greenspace export coefficient as this type of waste is taken into account in the urban surface water run off element of the calculator.
- The new methodology uses a different approach for calculating the urban export co-efficient so that it is applicable across the country. The values take into account the type of urban land and development site specific rainfall. This results in export values that will be specific to the rainfall at the location within the catchment.

5.0 Status of the National Nutrient Methodology and Calculators

Natural England is issuing the National Generic Methodology (and the associated catchment calculators) to provide Local Planning Authorities with the tools to progress nutrient neutrality as a potential mitigation solution to enable development that would otherwise adversely affect the integrity of habitats sites to proceed. However, at present this guidance **should be considered as provisional** due to the outstanding appeal to the Court of Appeal in **Wyatt v Fareham BC** [2021] EWHC 1434 (Admin), which although not concerned with the National Generic Nutrient Neutrality Methodology, could impact on certain elements contained within the Methodology because that case considers a similar (but not identical) earlier methodology for the Solent region. The Court of Appeal has granted permission for the appeal to be heard. The dates of the hearing are 5th and 6th April 2022. The outcome of the appeal hearing is not known. Nevertheless, Natural England is encouraged that the Judge in the High Court upheld Natural England's nutrient neutrality approach in principle and has responded to the Judge's comments in the Methodology. Natural England

intends to review this Methodology following judgement in the appeal in *Wyatt* which may require amendments to be made to the Methodology.

6.0. Mitigation Options

Mitigation to enable development to proceed within the affected catchments of the designated sites listed in Annex C can include nutrient neutrality as an option to avoid either permanent, or temporary increases in nutrients on the affected sites. Suitable mitigation measures might include constructed wetlands, land use change or retrofitting of Sustainable Urban Drainage systems (SUDs). Such measures must be effective for the duration of the impacts. In the case of new housing the duration of the impact is typically taken as in perpetuity, with the costs of maintaining, monitoring and enforcing mitigation calculated for a minimum of 80 – 125 years. It does not, however, follow that mitigation is not needed after that period, but rather the expectation is the mitigation will continue indefinitely (e.g. through securing appropriate permanent land use change).

There may be circumstances in which it is possible to define the 'lifetime of the development' more precisely, for example where consent is sought for the construction and use of a temporary structure that will be removed after a fixed period. In those circumstances, a Competent Authority may require mitigation to be maintained for a shorter period providing the Competent Authority is certain that adverse impacts on the integrity of a habitats site will not occur after the mitigation is removed. In those circumstances, a bespoke nutrient budget will be required, and early discussions with Natural England via our chargeable DAS are recommended Natural England Discretionary Advice Service.

Natural England has identified that nutrient neutrality is an option which can be used to mitigate the impacts of excess nutrients from development for the majority of sites listed in Annex C. However, there may be instances where due to the nature of the habitats site and/ or the location and scale of development it may not be appropriate to apply nutrient neutrality, as doing so would compromise the ability to restore the site to favourable conservation status in the long term, or it may not be possible to identify mitigation which will enable the development to be nutrient neutral. Situations where this is more likely to apply are explained in Annex C.

The extent of these nutrient neutrality constraints will be site and often development specific so will need to be considered on a case-by-case basis. Natural England recommends that Competent Authorities should carefully consider whether it is possible to allocate development in catchments or parts of catchments of sites which are likely to have significant constraints in being able to apply nutrient neutrality. Where nutrient neutrality cannot effectively mitigate the nutrient impacts of new developments, then consent should only be granted where other mitigation can effectively prevent an adverse effect on the integrity of site.

When consulting Natural England on proposals with the potential to affect water quality resulting in nutrient impacts on habitats sites, please ensure that a Habitats Regulations Assessment is included which has been informed by the Nutrient Neutrality Methodology (attached). Further guidance on the process is provided by the Decision Tree (Annex D) and HRA flow Diagram (Annex E) Without this information Natural England will not be in a position to comment on the significance of the impacts or the scope of any mitigation which may be required. For large scale developments, Natural England may provide advice on a cost recovery basis through our Discretionary Advice Service

All queries in relation to the application of this methodology to specific applications or development of strategic solutions will be treated as pre-application advice and therefore subject to chargeable services.

7.0 Forthcoming Tools and Guidance

Natural England's SSSI Impact Risk Zones will also be updated to include the affected catchments.

Annex B: National Map of Catchments



European protected sites requiring nutrient neutrality strategic solutions **Nutrient neutrality SSSI catchments**

SSSI subject to nutrient neutrality strategy Nutrient neutrality SSSI catchment

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Annex C: Habitats sites in unfavourable condition and where nutrient neutrality has been identified as a potential mitigation solution to enable development to proceed.

Table 1: Existing sites in unfavourable condition due to excessive nutrients which require a Habitats Regulations Assessment (HRA) and where nutrient neutrality is being deployed as mitigation.

Habitats Site & Catchment	LPA Affected	Nutrient	Summary of Development Types Affected	Nutrient Neutrality Methodology and Calculator produced by Natural England or LPA*.
Poole Harbour SPA / Ramsar	Dorset Council Bournemouth, Christchurch and Poole Council	Nitrogen and Phosphorus	Additional development that will result in a net increase in population served by a wastewater system, including new homes, student and tourist accommodation	Nitrogen Reduction in Poole Harbour Supplementary Planning Document (SPD)
The Solent	Basingstoke and Deane Borough Council Chichester District Council East Hampshire District Council Eastleigh Borough Council Fareham Borough Council Gosport Borough Council Havant Borough Council Isle of Wight Council New Forest District Council New Forest National Park Authority Portsmouth City Council South Downs National Park Authority Southampton City Council Test Valley Borough Council Wiltshire Council	Nitrogen for existing catchment (River Itchen includes Phosphorus and Nitrogen. See River Itchen in Table 2 for further details)	Additional development that will result in a net increase in population served by a wastewater system, including new homes, student and tourist accommodation	Methodology and Calculator developed and provided by Natural England.
River Avon SAC	Bournemouth Christchurch and Poole Council	Phosphorus	Additional development that will result in a net increase in population served by a	Interim Phosphate Calculator

	Dorset Council New Forest District Council New Forest National Park Authority Test Valley Borough Council Wiltshire Council		wastewater system, including new homes, student and tourist accommodation	
River Camel SAC	Cornwall Council	Phosphorus	 Additional development that will result in a net increase in population served by a wastewater system, including new homes, student and tourist accommodation. Additional locally specific advice 	Phosphate Calculator developed by consultants on behalf of Local Planning Authority
Stodmarsh SAC/Ramsar	Ashford Borough Council Canterbury City Council Dover District Council Folkestone and Hythe District Council Maidstone Borough Council Swale Borough Council	Nitrogen and Phosphorus	Additional development that will result in a net increase in population served by a wastewater system, including new homes, student and tourist accommodation.	Methodology and Calculator developed and provided by Natural England.
River Wye SAC (only applies to the River Lugg component)	Herefordshire Council Malvern Hills District Council	Phosphorus	Additional development that will result in a net increase in population served by a wastewater system, including new homes, student and tourist accommodation.	Phosphate Calculator developed by consultants on behalf of Local Planning Authority
Somerset Levels and Moors Ramsar	Dorset Council Exmoor National Park Mendip District Council Mid Devon District Council Sedgemoor District Council Somerset West and Taunton District Council South Somerset District Wiltshire Council	Phosphorus	 Additional residential and commercial development that will result in a net increase in population served by a wastewater system, including new homes, student and tourist accommodation. Additional locally specific advice 	Methodology and calculator developed by consultants on behalf of Local Planning Authority

^{*}Note: Nutrient neutrality calculators have been provided for all the catchments listed above, even where there is an existing nutrient neutrality calculator .

Table 2: Additional habitats sites in unfavourable condition due to excessive nutrients which require a Habitats Regulations Assessment (HRA) and where nutrient neutrality is a potential solution to enable development to proceed.

Habitats site & Catchment	LPA Affected	Nutrient	
Chesil and the Fleet SAC/SPA	Dorset Council	Nitrogen and Phosphorus	
Esthwaite Water Ramsar	South Lakeland Council	Phosphorus	
Hornsea Mere SPA	East Riding of Yorkshire Council	Nitrogen and	
		Phosphorus	
Lindisfarne SPA/Ramsar	Northumberland County Council	Nitrogen	
Oak Mere SAC	Cheshire West and Chester Council	Phosphorus	
Peak District Dales SAC	Derbyshire Dales District Council High Peak Borough Council Peak District National Park Authority	Phosphorus	
River Axe SAC	Dorset Council East Devon District Council Somerset West & Taunton Council South Somerset District Council	Phosphorus	
River Clun SAC	Herefordshire Council	Nitrogen and	
	Shropshire Council	Phosphorus	
River Derwent & Bassenthwaite Lake SAC (only applies to catchments of Bassenthwaite Lake (River Derwent and Tributaries SSSI unit 1) and River Marron (unit 124 of River Derwent and Tributaries SSSI).	Allerdale Borough Council Copeland Borough Council Eden District Council Lake District National Park	Phosphorus	
River Eden SAC	Allerdale Borough Council Carlisle City Council Durham County Council Eden District Council Lake District National Park Northumberland County Council Northumberland National Park Richmondshire District Council South Lakeland Council	Phosphorus	
River Itchen SAC (part of Solent Catchment)	Basingstoke and Deane Borough Council East Hampshire District Council Eastleigh Borough Council Winchester City Council	Nitrogen and Phosphorus	
River Kent SAC (only applies to catchments of units 104 and 111 of River Kent SSSI)	Eden District Council Lake District National Park South Lakeland Council	Phosphorus	
River Lambourn SAC	Swindon Borough Council Vale of White Horse District Council West Berkshire Council Wiltshire Council	Phosphorus	
River Mease SAC	East Staffordshire Borough Council Hinckley and Bosworth Borough Council Lichfield District Council North Warwickshire Borough Council		

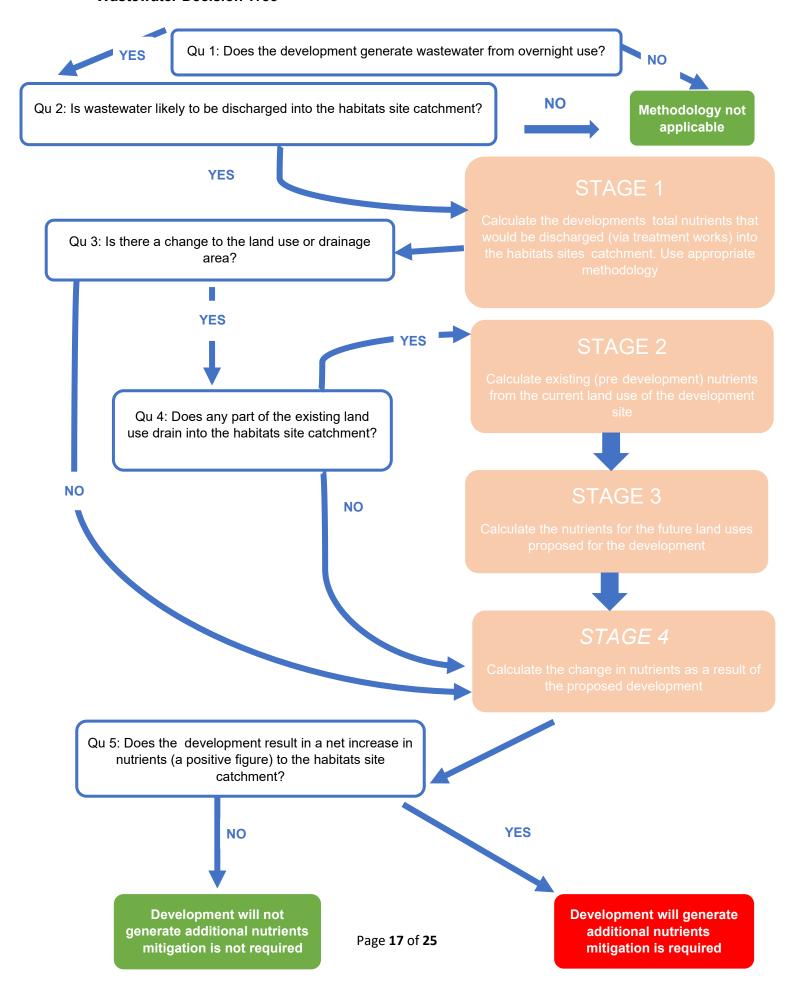
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	North West Leicestershire District Council South Derbyshire District Council	
River Wensum SAC	Borough Council of King's Lynn and West Norfolk Breckland Council Broadland & South Norfolk Council North Norfolk District Council Norwich City Council	Phosphorus
Roman Walls Loughs SAC	Northumberland County Council Northumberland National Park Authority	Phosphorus
Rostherne Mere Ramsar	Cheshire East Council	Nitrogen and Phosphorus
Teesmouth & Cleveland Coast SPA/Ramsar	Darlington Borough Council Durham County Council Eden District Council Hambleton District Council Hartlepool Borough Council Middlesbrough Council North York Moors National Park Redcar and Cleveland Borough Council Richmondshire District Council Stockton-on-Tees Borough Council	Nitrogen
The Broads SAC/Ramsar (only the following are included: Bure Broads and Marshes SSSI Trinity Broads SSSI Yare Broads and Marshes SSSI Ant Broads and Marshes SSSI Upper Thurne Broads and Marshes SSSI	Borough Council of King's Lynn and West Norfolk Breckland Council Broadland & South Norfolk Council Great Yarmouth Borough Council North Norfolk District Council Norwich City Council The Broads Authority	Nitrogen and Phosphorus and
West Midlands Mosses SAC (only catchments of Abbotts Moss SSSI and Wynbunbury Moss SSSI are included)	Cheshire East Council (Wynbunbury) Cheshire West and Chester Council (Abbotts)	Nitrogen and Phosphorus

Situations where Nutrient Neutrality may not be an appropriate Mitigation Measure

- Lake or wetland sites and particularly those with long residence times or which have a limited or no outflow. For these types of sites nutrients will accumulate over time and therefore they are particularly vulnerable to even small increases in nutrients which will further hinder restoration. Where one of these sites is already unfavourable due to nutrient enrichment it is also likely that current sources of nutrients will need to be reduced to restore the site and therefore using these measures for nutrient neutrality would undermine the ability to restore the site.
- Where the development impact is direct to a habitats site terrestrial wetland habitat rather than to surface water. In these circumstances the mitigation would need to be

- at the exact same location where the development is having its effect on the site, as reductions in nutrients in other locations of the wetland would not neutralise the effect of the development. Therefore, potential mitigation options will likely be very limited.
- Where the development impact is via groundwater discharging direct to a habitats site terrestrial wetland habitat rather than to groundwater discharging to surface water. In these circumstances there will be variation in the effectiveness of measures depending on their location within the groundwater catchment compared to development. This means measures may need to be located in the same part of the groundwater catchment to ensure that it would neutralise the nutrient increase from the development before it reaches the site, thereby constraining the area where mitigation could be targeted to a smaller area.
- Development (particularly larger developments) in the headwaters of a catchment. In these circumstances the area upstream of the development where nutrient neutrality mitigation can be located will be restricted to a small area, providing much more limited and perhaps in some cases no feasible opportunities for mitigation through nutrient neutrality, although other mitigation measures may be possible.
- Habitats sites with small catchments. Again, there will be a much more limited area where mitigation can be targeted thereby limiting potential nutrient neutrality mitigation opportunities.
- Where widespread and/or large-scale uptake of measures are needed to restore the
 habitats site or part of the site (e.g. identified in the DWPP or NMP) thereby
 significantly constraining the measures available for counterbalancing additional
 nutrient inputs in a way which will not undermine site restoration.

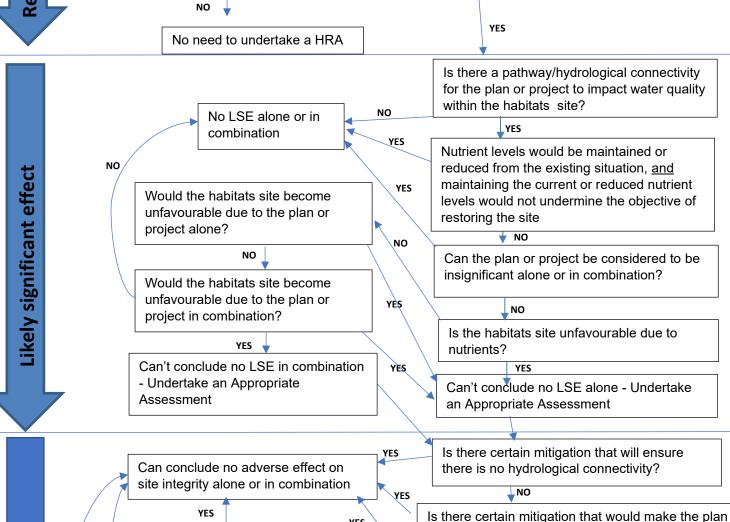
Annex D: Nutrient Assessment Methodology for Development which Generates Wastewater Decision Tree

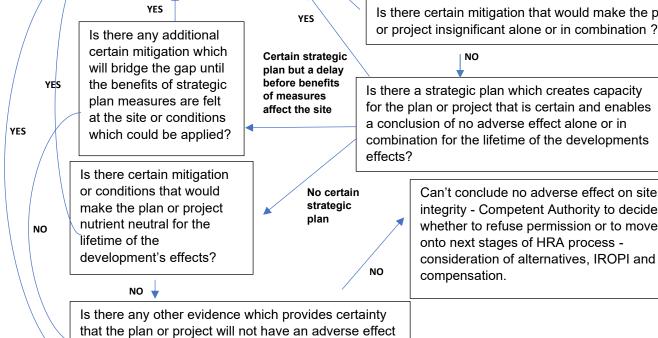


Annex E: Flow Diagram of HRA Process for Consultations Contributing Nutrients

Does the plan or project create a source of water pollution or have an impact on water quality (e.g. alters dilution)? AND

Is the plan or project within the hydrological catchment of a habitats site which includes interest features that are sensitive to the water quality impacts from the plan or project?





on site integrity alone or in combination?

Is there a strategic plan which creates capacity for the plan or project that is certain and enables a conclusion of no adverse effect alone or in combination for the lifetime of the developments effects?

> Can't conclude no adverse effect on site integrity - Competent Authority to decide whether to refuse permission or to move onto next stages of HRA process consideration of alternatives, IROPI and compensation.

Annex F: Thresholds for Insignificant Effects – Phosphorus Discharges to Ground

<u>Waddenzee</u> established that an Appropriate Assessment (AA) is required where there is a "probability or a risk" of a significant effect on the site concerned. In light of the precautionary principle, a plan or project is likely to have a significant effect if the risk cannot be excluded on the basis of objective evidence. Any site specific rationale or thresholds to demonstrate the insignificance of effects would need to ensure that the risk of Likely Significant Effect (LSE) (alone or in combination) can be excluded. Where evidence is not currently available or it is uncertain, it would be more appropriate to take the plan or project through to AA for further consideration. It may still be possible to conclude no adverse effect on site integrity (alone or in combination) in the AA through further consideration as to the specific facts of the case in question and/or through consideration of appropriate mitigation.

Natural England currently considers that it is difficult to make robust arguments around generic standardised thresholds for levels of water quality impacts that exclude the risk of likely significant effects (alone or in combination) for all sites and situations. There are a number of different factors that are variable between sites which can influence the risk of cumulative effects and the sensitivity and vulnerability of the site and therefore what might be significant.

Thresholds for insignificant levels of phosphorus discharges to ground

Natural England considers that there is an exception to this position on generic thresholds in relation to discharges of phosphorus to ground.

Any plan or project which requires planning permission, Building Regulations approval or an environmental permit from the Environment Agency must comply with the requirements of those regulatory regimes as well as what is needed to meet the Habitat Regulations. For example, all of these regimes require that developments should be connected to the public foul sewerage network wherever this is reasonable. This includes areas where the Habitats Regulations apply and any need to reduce nutrient inputs in those areas should not lead to the installation of non-mains foul drainage systems in circumstances where connection to the public foul sewer would otherwise be considered reasonable. Any plan or project then connecting to mains would still need to also be compliant with Habitat Regulations.

Summary of evidence

Septic tank systems or package treatment plants that discharge to ground via a drainage field should pose little threat to the environment, because much of the P discharged is removed from the effluent as it percolates through the soil in the drainage field¹¹. The risk of water pollution by these types of discharges to ground depends on a range of factors that affect their success or failure and can be summarised by three key factors¹²:

- 1. improper location
- 2. poor design
- 3. incorrect management

¹¹ Robertson WD, Van Stempvoort ER & Schiff SL. 2019. Review of Phosphorus attenuation in groundwater plumes from 24 septic systems.

¹² MAY, L., PLACE, C., O'MALLEY, M. & SPEARS, B. 2015. *The impact of phosphorus inputs from small discharges on designated freshwater sites*. Natural England Commissioned Reports, <u>NECR 170</u>.

Phosphorus is removed from the effluent within the drainage field through retention in the soil through sorption within the aerated soil zone and mineral precipitation. How much phosphorus is removed will depend on the soil type and phosphorus characteristics, mineral content, pH, texture, and the hydraulic loading rate. P sorption can be reversed and P desorption can occur in certain conditions e.g. change in redox conditions¹³. For the drainage field to work effectively the drainage field needs to have acceptable year round percolation rates which will be influenced by the soil type, as if they drain too quickly or to slowly effective phosphorus removal will not take place. In addition if infiltration rates are lower than the loading rate of the effluent into the drainage field then hydraulic failure can occur which results in the effluent being discharged over the soil surface. Therefore correct design of the system is important. The Building Regulations¹⁴ set out design and construction standards for septic tanks, package treatment plants and drainage fields. In relation to drainage fields they include the need for a percolation test, a method for how this should be undertaken and the minimum and maximum percolation values (V_D) which ensure that the drainage field effectively removes pollutants. This is then used to calculate the size of the drainage field required for the size of the household it will be serving.

Robertson et al (2019)⁸ found that the carbonate mineral content of the drainage field sediments can also affect the P retention within the drainage fields and therefore the distance any P plume extends. Calcareous sediments having very high P retention (average 97%), with plumes not extending beyond 10m and non-calcareous sediments showing greater variability and having a lower P retention (average 69%) with some of the P plumes extending beyond 15m up to 100m in one case.

The evidence has shown that it is the aerated drainage field sediments which provides a key function in terms of removing the phosphorus from the effluent before it enters a receiving water body (surface or groundwater). Any enhanced connectivity to a water body, which short circuits this process, is probably one of the main factors that causes pollution of habitats sites (and other water dependent sites) by these systems¹⁵ ¹⁶. Therefore it will be important that the drainage field is sited far enough away from any watercourse, ditch, drain etc. as well as that it is not in a location where the groundwater is high enough that comes into connection with this aerated zone. Fractured rock or fissured geology could also short circuit this process. In addition seasonal flooding can wash out the contents of the tanks. Slope also affects the way the drainage field functions, with steeper slopes having a higher risk of run off.

¹³ Mary G. Lusk, Gurpal S. Toor, Yun-Ya Yang, Sara Mechtensimer, Mriganka De

[&]amp; Thomas A. Obreza. 2017. *A review of the fate and transport of nitrogen, phosphorus, pathogens, and trace organic chemicals in septic systems*, Critical Reviews in Environmental Science and Technology, 47:7, 455-541.

¹⁴ <u>Building Regulations, Drainage and Waste disposal</u> (2015), Document H, Section H2.

¹⁵ MAY, L., WITHERS, P.J., STRATFORD, C., BOWES, M., ROBINSON, D. & GOZZARD, E. 2015. Development of a risk assessment tool to assess the significance of septic tanks around freshwater SSSIs: Phase 1 – Understanding better the retention of phosphorus in the drainage field. Natural England Commissioned Reports, <u>NECR171</u>

¹⁶ MAY, L., DUDLEY, B.J., WOODS, H. & MILES, S. 2016. *Development of a Risk Assessment Tool to Evaluate the Significance of Septic Tanks Around Freshwater SSSIs.* <u>NECR 222</u>

There is also some evidence that density (i.e. number) of these types of systems in an area also has a bearing on the risk of pollution. In general, lower densities of tanks tend to cause less contamination of downstream water bodies than higher densities of tanks.

Proposed thresholds

Small discharges to ground i.e. less than 2m³/day¹¹ that are within the surface or groundwater catchment of a designated site will present a low risk that the phosphorus will have a significant effect on the designated site where certain conditions are met:

- a) The drainage field is more than 50m from the designated site boundary (or sensitive interest feature) 18 and;
- b) The drainage field is more than 40m from any surface water feature e.g. ditch, drain, watercourse¹⁹, **and**;
- c) The drainage field in an area with a slope no greater than 15%²⁰, **and**;
- d) The drainage field is in an area where the high water table groundwater depth is at least 2m below the surface at all times²¹ **and**;
- e) The drainage field will not be subject to significant flooding, e.g. it is not in flood zone 2 or 3 **and**;
- f) There are no other known factors which would expedite the transport of phosphorus⁹ for example fissured geology, insufficient soil below the drainage pipes, known sewer flooding, soil/geology type and its ability for P sorption/mineralisation or presence of conditions would cause remobilisation phosphorus, presence of mineshafts, etc and;
- g) To ensure that there is no significant in combination effect, the discharge to ground should be at least 200m from any other discharge to ground²².

¹⁷ A limit of 2m3/day is used based on this being the size used for discharges to ground in the General Binding Rules and is representative of the size of the majority of the septic tanks investigated within <u>NECR171</u>, from which most of the criteria are based.

¹⁸ 50m is the distance as which no measurable phosphorus signal was detected at this distance (NECR171 and NECR222). Robertson *et al* (2019) also found that the majority (although not all) of plumes did not extend further than this distance

¹⁹ 40m is the distance that represents a low risk, based on there was a weak phosphorus signal this distance for some of the small discharges (NECR171 and NECR222) This is a slightly less precautionary value than the 50m distance to the Habitats site as there will be the capacity for further attenuation and dilution before the site.

²⁰ 15% is the slope that represents a low risk based on the methodology outlined in NECR222.

²¹ 2m is the groundwater depth that represents a low risk, based on very low levels being detected in soil at depth below this (NECR171 and NECR222)

²² The 200m is based on the 50m distance where no measurable phosphorus signal was detected (NECR171) for each septic tank. So for two drainage field areas not to overlap they need to be at least 100m apart. A safety factor of two is then applied to ensure that in the long term there will be the certainty that the effective drainage field phosphorus retention areas don't overlap. This then also takes account of the greatest distance that Robertson et al (2019) found a plume to extend which was 100m to ensure there would be no overlap. It also ensures that the maximum density of these systems is no more than one for every 4ha (or 25 per km2), as identified in NECR170.

A GIS layer is available from NE²³ which looks at conditions b, c and d above only, for the whole of England. Where this layer indicates that there is a low risk, then the three conditions (b, c & d) above can be considered to be met. Where there is a high or medium risk identified, then one or more of the three conditions (b, c & d) will not be met. This GIS layer can be shared with the EA and Local Authorities with the relevant data licence via our GI team, but not with developers due to the terms in the data licence. If site specific monitoring/modelled data is presented for conditions b, c or d which provides greater certainty than the national dataset used to produce the risk map, then this can override the risk map. It may be time consuming and/or costly to undertake site-specific monitoring that provides certainty for some of the conditions such as groundwater depth, due to the inherent variability over time and therefore the need for any monitoring to cover a long enough time period (several years) and to a sufficient frequency to determine the highest groundwater depth. So it is acceptable to rely on modelled or national dataset where these are the best available data and scientifically robust.

To consider the other three conditions (a, e and f) other data sources will need to be considered. Condition a can be looked at through using the designated site data layer²⁴ and calculating the distance from the site boundary. Condition e can use the EA flood risk maps (https://flood-map-for-planning.service.gov.uk/). Condition f should make use of any sewer flood data, information on local geology and soils, groundwater phosphorus concentration monitoring within the catchment or other local information which it is readily available. Elevated concentrations of phosphorus in groundwater would indicate phosphorus transport being short circuited e.g. through fissures, that it is not being effectively retained within the drainage field or it is being remobilised. It can be assumed that phosphorus is being effectively retained and not remobilised unless there is existing evidence at the discharge location or within the wider catchment which suggest that this may be occurring in the same conditions to those present at the location of the proposed discharge. Such evidence could include investigations, known soil or geological conditions or groundwater water quality (P) data from similar soil/geological conditions.

As not all of the phosphorus will be retained by the soil, condition g is to ensure that there is no in combination or cumulative effect from a number of these discharges in an area which together could add up to have a significant effect.

If conditions a to g are all met this represents a low risk that phosphate will reach the site, and not zero risk (i.e. not that no phosphorus from the discharge will ever reach the site in all cases). There will be further processes of dilution and attenuation between the drainage field and the site, which will provide further reduction and the current evidence would suggest that the scale of any inputs from these sources would not be significant.

Where best available evidence indicates that these conditions are met, Natural England advice is a conclusion of no LSE alone or in combination for phosphorus can be reached in these circumstances. Where uncertainty remains so LSE cannot be ruled out or evidence exists that there is a risk of phosphate from small discharges to ground causing a significant effect to a designated site (e.g. from SAGIS modelling or monitoring investigations), then Natural England advice is that there is a LSE or LSE cannot be ruled out and an AA should

²³. The dataset LPAs can <u>request the GIS layer</u> for the England sewage discharge risk map from Natural England. The dataset is called - Small_Sewage_Discharge_Risk_Zone_Map_For_England (Dissolved).

²⁴ The Special Protection Area (England), Potential Special Protection Area (England), Special Areas of Conservation (England), Possible Special Areas of Conservation (England), Ramsar (England) and Proposed Ramsar (England) data layers can be download from Natural England Open Geodata portal

be undertaken. Where evidence is presented which provides certainty that there will be no LSE even though these conditions are not met e.g. better local information, then Natural England's advice may be no LSE, but would be determined on a case by case basis.

The Competent Authority, as the decision maker, will need to determine whether it agrees with NEs advice.

For developments which allow for increases in the number of people that will be served by an existing discharge to a drainage field, it will be important to consider whether the existing system has sufficient capacity in its design to accommodate the increase, without increasing the risk of pollution.

The evidence underpinning these thresholds will be periodically reviewed and the thresholds will be amended as necessary to take account of any new evidence.

This approach does not apply to nitrogen as it does not get taken up by the soil like phosphorus.

Further work is necessary to review the evidence and determine if it is possible to establish any other generic insignificance thresholds for other development or discharge types. It may also be possible to develop site specific insignificance thresholds.

Annex G: Natural England Area Team Contacts

Habitat Site	Area Team	Area Team Manager	Additional Area Team contact
Oak Mere SAC Rostherne Mere RAMSAR West Midlands Mosses SAC	Cheshire and Lancashire	Ginny Hinton ginny.hinton@naturalengland.org.uk	Petula Neilson Bond
Estwaite Water Ramsar River Derwent & Bassenthwaite Lake SAC River Eden SAC River Kent SAC	Cumbria	Helen Kirkby helen.kirkby@naturalengland.org.uk	Helen Smith
River Axe SAC River Camel SAC	Devon, Cornwall and Isles of Scilly	Wesley Smyth wesley.smyth@naturalengland.org.uk	Denise Ramsay for LPAs in Devon and Simon Stonehouse for LPAs in Somerset Denise Ramsay
Peak District Dales SAC River Mease SAC	East Midlands	Vicky Manton victoria.manton@naturalengland.org.uk	lan Butterfield
River Wensum SAC The Broads SAC/Ramsar	Norfolk and Suffolk	Helen Dixon helen.dixon@naturalengland.org.uk	Jack Haynes
Lindisfarne SPA/Ramsar Roman Walls Loughs SAC	Northumbria	Christine Venus christine.venus@naturalengland.org.uk	Lewis Pemberton Andrew Whitehead

Teesmouth & Cleveland Coast SPA/Ramsar			
Stodmarsh SAC/Ramsar	Sussex and Kent	James Seymour james.seymour@naturalengland.org.uk	Sue Beale
Solent		Allison Potts	Becky Aziz
River Itchen SAC		allison.potts@naturalengland.org.uk	Becky Aziz
River Lambourn SAC	Thames Solent	Please contact the Thames Solent Team for developments in Hampshire and Isle of Wight and the Kent and Sussex Team for developments in Chichester and Wessex Team for developments in Wiltshire.	Amy Kitching
River Avon SAC		Rachel Williams	
Somerset Levels & Moors Ramsar	Wessex	rachel.williams@naturalengland.org.uk	Tom Lord
Chesil and the Fleet SAC/SPA	VVESSEX		TOTT LOIG
Poole Harbour SPA Ramsar			
River Clun SAC		Emma Johnson	
River Lugg (part of River Wye SAC)	West Midlands	emma.johnson@naturalengland.org.uk	Hayley Fleming
West Midland Mosses SAC			
Hornsea Mere SPA	Yorkshire and Lincolnshire	Paul Duncan paul.duncan@naturalengland.org.uk	Hannah Gooch