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Preparing the Publication Draft Plan Report

Herefordshire Minerals and Waste Local Plan

March 2020, updated August and September 2020

HENDECA LTD

Contents

1. Introduction

1.1 Background and Purpose of the Report

1.1.1 This Report provides an overview of the work undertaken, and decisions reached, in preparing the publication draft Herefordshire Minerals and Waste Local Plan (the 'P'Draft MWLP').

Consultation of the Draft Minerals and Waste Local Plan

1.1.2 Consultation on the Draft Minerals and Waste Local Plan (dated December 2018, the 'Draft MWLP 2018') and its accompanying evidence base documents occurred over the period 21 January to 4 March 2019, including a consultation event held on 5 February 2019.

1.1.3 The documents that accompanied the Draft MWLP 2018 were:

- Minerals Need Assessment Update 2018 (the 'MNA Update 2018');
- Waste Need Assessment Update 2018 (the 'WNA Update 2018');
- Local Aggregates Assessment 2018;
- Sustainability Appraisal 2018;
- Habitats Regulations Assessment 2018;
- Spatial Context and Sites Report 2018;
- Preparing the Draft Plan Report 2018; and
- Minerals and Waste Issues and Options Paper 2017.

Work undertaken since consultation of the Draft MWLP 2018

1.1.4 Throughout spring and summer 2018, the responses to the Draft MWLP 2018 were reviewed with additional work undertaken as required. The supplementary tasks included further analysis of those sites proposed to be allocated, assessment of a new site that was promoted through the representations, considering historic landfill sites within Herefordshire, and updating the need assessments.

1.1.5 In addition, the P'Draft MWLP has been prepared to: reflect changes in the National Planning Policy Framework (NPPF) and other relevant national policy documents, including the latest national waste strategy titled 'Our waste, our resources: a strategy for England'[1] (the 'Resources and Waste Strategy' or 'RWS') published by Defra in December 2018; and incorporate recommendations from the Level 2 Strategic Flood Risk Assessment completed in 2020.

1.1.6 At the time of writing, the P'Draft MWLP is accompanied by:

- this Report, Preparing the Publication Draft MWLP;
- Supplementary Report to the Spatial Context and Sites Report (the 'Supplementary Sites Report');
- Minerals Need Assessment 2019 (the 'MNA 2019');
- Waste Need Assessment 2019 (the 'WNA 2019');

[1] https://www.gov.uk/government/publications/resources-and-waste-strategy-for-england [26.09.2019:13:22]

- Local Aggregates Assessment 2019 (the 'LAA 2019');
- Herefordshire Minerals and Waste Strategic Flood Risk Assessment, Level 2, and associated appendices (WSP, August 2020, 'MWSFRA 2020'); and
- Herefordshire Minerals and Waste Local Plan Consultation Statement ('Consultation Statement 2020').

1.1.7 All of these reports are key elements of the evidence base for the Minerals and Waste Local Plan. They will all be made available for public consultation.

1.1.8 The Strategic Environmental Assessment and Habitats Regulation Assessment are still to be completed. They will be completed and considered prior to finalising the P'Draft MWLP and submitting it for Examination. Any key changes made as a result of these assessments will be reported in a supplementary report to this report.

1.1.9 A separate report will also be prepared to update how the Duty to Co-operate has been implemented since consultation on the Draft MWLP.

Updates made in August and September 2020

1.1.10 This Report was completed in March 2020, just prior to the UK entering a period of lockdown as a result of the coronavirus COVID 19. The policy team within Herefordshire Council was deployed to resource the Council's support to local residents during this time and any further work on the MWLP was largely suspended.

1.1.11 Work recommenced in July 2020, with the P'Draft MWLP being commenced on the necessary schedule of meetings to make Full Council in December 2020. Two key updates also became available at this time and have been used to finalise the P'Draft MWLP.

1.1.12 First, a meeting of the Nutrient Management Board (held on 9 July 2020) considered proposed updates to the River Wye Nutrient Management Action Plan. These updates have been considered for their relevance to the MWLP.

1.1.13 Second, the Supplementary Sites Report was completed by reference to the MWSFRA as published in January 2020. This version of the SFRA was then subject to consultation with the Environment Agency, after which it was updated and published in its final form (in August 2020). Key elements of the MWLP, particularly the key development criteria, have been reviewed to ensure it properly reflects the final advice of the MWSFRA. Consequently, the entry at paragraph 1.1.6 above refers to the final MWSFRA, dated August 2020.

1.1.14 These changes have prompted this report to be reviewed and updates to it, and the P'Draft MWLP, to be made as appropriate. These updates are identified in this report using the title above 'Updates made in August 2020'.

1.1.15 A meeting was held on 1 September 2020 with Historic England, to discuss the P'Draft MWLP and the additional work that had been undertaken to address its previous comments. Historic England also provided, without prejudice, informal comments on the MWLP as drafted. The advice received during this communication has been incorporated into the P'Draft MWLP to the extent possible at this time. These updates are identified in this report using the title above 'Updates made in September 2020'.

1.2 European legislation

1.2.1 At the time of writing (March 2020) the UK is in a transition period of negotiation with the EU, expected to last until the end of 2020. During this transition period, exiting legislation remains in place and applicable across the UK[2].

1.2.2 The details of any final deal(s) made with the EU are not currently known. In relation to the wide ranging environmental legislation relevant to the MWLP, it is not unreasonable to expect that existing legislation will remain in place and this is the approach adopted in preparing the MWLP.

1.2.3 Consequently, existing EU legislation is referenced throughout this Report and the other evidence base documents, and will remain within the MWLP itself unless it becomes clear that it should be removed.

1.3 Format of the Report

1.3.1 This Report addresses relevant matters in the following order:

- **Section 2** considers the key matters raised in the representations made to the Draft MWLP 2018;
- **Section 3** considers the role of the MWLP in addressing phosphate in the River Wye SAC;
- **Section 4** updates the position in relation to minerals; and
- **Section 5** updates the position in relation to waste.

[2] https://www.gov.uk/transition [18.03.2020@15:00]

2. Key matters raised in representations to the Draft MWLP 2018

2.1 Introduction

2.1.1 56 submissions were made in response to the Draft MWLP. Each of the representation received has been reviewed and responded to, as reported in the Consultation Statement 2020.

2.1.2 This section of this Report is focussed on those representations that are considered to be key matters in relation to the policy of the Minerals and Waste Local Plan; i.e. those that would affect the policy approach or evidence base of the MWLP.

2.1.3 The key matters that have been identified, and which are consequently addressed further within this Report, are:

- Review of the Core Strategy;
- Policy M7: Unconventional Hydrocarbons;
- Policy W3: Agricultural Waste;
- Policy W6: Preferred locations for construction, demolition and excavation waste management;
- Agent of change, safeguarding and buffer zones;
- Presentation and use of data in the site assessment;
- Environment Agency – non-spatial matters;
- Historic England – delivering a positive approach to the historic environment;

2.2 Review of the Core Strategy

2.2.1 Some respondents commented that reliance upon the Core Strategy was not appropriate, generally either because they felt the evidence to that development plan document, or the consequent policy was out of date.

2.2.2 Evidence that goes to the heart of the MWLP has been either undertaken specifically in the preparation of the document (for example the minerals and waste need assessments) or has been reviewed as appropriate to it (for example considering potential environmental effects from the proposed sites to be allocated). Consequently, the evidence base upon which the P'Draft MWLP is reliant is considered to be appropriate and robust.

2.2.3 It is recognised that a review of the Core Strategy has commenced. The plan making teams responsible for both this review and preparation of the P'Draft MWLP are in regular dialogue to ensure that together these documents will continue to provide a comprehensive policy framework.

2.2.4 Some of the policies in the Draft MWLP were prepared to follow those presented in the adopted Core Strategy and consequently continued the relevant policy numbering, for example MWLP policy SS8 was intended to follow Core Strategy policy SS7. Recognising that the Core Strategy policy numbers may change in the update, it appears sensible to change all

of these more strategic policies (within the MWLP) to have their own referencing system, which will use a prefix of 'SP' followed by consecutive numbers, for example SP1.

2.3 Policy M7: Unconventional Hydrocarbons

2.3.1 As explained in the Preparing the Draft Plan Report 2018 (from paragraph 4.4.24) there is just one area of coal bed methane within Herefordshire. The Oil and Gas Authority (OGA) confirmed at that time that the Petroleum Exploration and Development Licence (PEDL) had not been taken up, although along with any other block, it may be offered at some point in the future. The Report also identified both the opposition to fracking (made through representations to the Issues and Options Report) and the Full Council resolution (of 16 December 2016) to seek to block any hydrocarbon extraction processes in or under the Areas of Outstanding Beauty within Herefordshire.

2.3.2 At the time of preparing the Draft MWLP 2018, the NPPF (as published at July 2018) advised mineral planning authorities (at paragraph 209(a)) to '*recognise the benefits of on-shore oil and gas development, including unconventional hydrocarbons, for the security of energy supplies and supporting the transition to a low-carbon economy; and put in place policies to facilitate their exploration and extraction;*'.

2.3.3 Consequently, even whilst recognising the level of opposition to the extraction of unconventional hydrocarbons, it was concluded that the Draft MWLP 2018 should include a policy regarding this type of minerals development.

2.3.4 A range of representations was received in response to Draft MWLP 2018 policy M7, including: some remaining objection to the principle of having the policy; the CPRE recognising the inevitability of having the policy and referring to its own guidance; the Environment Agency referring to its own guidance and regulatory role; the Coal Authority welcoming the policy; and industry representatives considering the policy to be inappropriate, poorly worded and too restrictive.

2.3.5 The exploration and extraction of unconventional hydrocarbons remains a topic subject to legal challenge[3] and change.

2.3.6 Through July to October 2018, the Government undertook early stage consultation on the inclusion of shale gas production projects to be included in the nationally significant infrastructure project (NSIP) regime. In November 2019, the Government reported its conclusion, that '*it is our view that while the UK shale industry remains at an early exploratory stage including the production phase into the Nationally Significant Infrastructure Project (NSIP) regime would be premature.*'[4]

2.3.7 Just prior to the start of that consultation, report titled 'Planning guidance on fracking'[5] (July 2018) was published. Paragraph 59 of that report states:

[3] Friends of the Earth Ltd v Secretary of State for Housing, Communities & Local Government [2019] EWHC 518 (Admin) and Stephenson v Secretary of State for Housing, Communities & Local Government [2019] EWHC 519 (Admin) (Stephenson) referenced in MHCLG Chief Planner Letter of 21 March 2019

[4] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/844047/shale-gas-nsip-consultation-government-response.pdf [18.03.2020@15:20]

[5] https://publications.parliament.uk/pa/cm201719/cmselect/cmcomloc/767/767.pdf [15.10.2019@16:53]

'*There is a contradiction between the spirit of the Localism Act 2011 and the 2018 Written Ministerial Statement on fracking planning policy which could unreasonably restrict Local Plans. Mineral Planning Authorities are best placed to understand their local area and weigh up what requirements should be in place for fracking developments. We note that Local Plans are already subject to scrutiny at national level from the Planning Inspectorate. Given that the English planning system is plan led, Mineral Planning Authorities should be free to adapt their Local Plans as they see fit as long as they do not arbitrarily restrict fracking developments. It is essential that Mineral Planning Authorities have the right to put conditions in their Local Plans which can be justified having proper regard to local circumstances*.'

2.3.8 Ministerial Written Statement[6] made on 23 May 2019 refers to Stephenson, confirming that '*paragraph 209(a) of the National Planning Policy Framework has been quashed.*'

2.3.9 The OGA has been consulted again, with several emails sent over a period of time from September 2019 to March 2020), but no response received.

2.3.10 On 2 November 2019, the Government issued a moratorium on fracking, with immediate effect[7]. At the time of writing, the ban had not been made permanent. The oil and gas industry has indicated that it is committed to providing the scientific evidence required to have the moratorium lifted.

2.3.11 It is concluded that policy M7 should be removed from the MWLP. However, as explained within the supporting text to the policy, both conventional and unconventional hydrocarbons are covered included in policy M1, to retain flexibility should either resource become workable and of interest in the future. As mineral resources, they would also be protected by policy M2.

2.3.12 Further, whilst policy M7 has been deleted, the supplementary text that preceded it has been retained, but reviewed and updated, incorporating reference to the guidance provided on the Department for Business, Energy and Industrial Strategy website, 'Guidance on fracking: developing shale gas in the UK' last updated in March 2019[8].

2.4 Policy W3: Agricultural Waste

2.4.1 As recognised at paragraph 2.6.30 of the Preparing the Draft Plan Report 2018, it is unusual to include a policy relevant to agricultural waste within a development plan document; however, '*it is relevant here as Herefordshire is a unitary authority that has a strong agricultural sector*.'

2.4.2 In addition, it is recognised that the Draft MWLP 2018 incorrectly identified a '*relatively small role*' played by agriculture in terms of impacts on the River Wye SAC (paragraph 7.2.12). In fact, the River Wye SAC Nutrient Management Plan, Evidence base and options appraisal[9] (the 'River Wye SAC NMP') identifies diffuse phosphate pollution from agriculture to be one of the main pressures (alongside sewage treatment works discharges).

[6] Reference: HCWS1586

[7] https://www.gov.uk/government/news/government-ends-support-for-fracking [18.03.2020@15:25]

[8] https://www.gov.uk/government/publications/about-shale-gas-and-hydraulic-fracturing-fracking/developing-shale-oil-and-gas-in-the-uk [15.10.2019@16:57]

[9] https://www.gov.uk/government/publications/nutrient-management-plan-river-wye [15.10.2019@16:58]

2.4.3 As is described in more detail at section 3 of this Report, the judgement made in the Dutch Case strengthens the need for all available tools to be used to reduce phosphate levels in the River Wye SAC.

2.4.4 Consequently, whilst there was some objection to policy W3 made in the representations to the Draft MWLP 2018, it is retained within the P'Draft MWLP, albeit with some amendments to both the supporting text and the policy itself, primarily to clarify the policy purpose.

Updates made in August 2020

2.4.5 This position has been further strengthened by the evidence contained in the report to the Nutrient Management Board Meeting of 9 July 2020. This is discussed in more detail at section 3 of this Report.

2.5 Policy W6: Preferred locations for construction, demolition and excavation waste management facilities

2.5.1 There was limited comment made to policy W6; however, the representation submitted on behalf of Attaghan Limited Stoke Edith Estate merits further consideration.

2.5.2 The representation considers that Perton Quarry could be suitable for waste recycling or deposit and should not be discounted on account of the existing permission.

2.5.3 Perton Quarry is not considered suitable to be promoted within the MWLP as a waste treatment or disposal location, not least on account of the local highway network. However, as recognised in the representation, the site could be proposed for inert waste treatment under policy W6, as an active mineral working.

2.5.4 This is the intention of policy W6; that active mineral sites may be used for inert waste recycling. However, it will be for the submitted application to demonstrate that such a proposal would be acceptable development; this is different to the site specifically being promoted within the MWLP.

2.5.5 Further, this representation indicated that policy W6 should be amended, in order to clarify the order of preference in terms of locations for inert waste recycling. The preferred location is at Former Lugg Bridge Quarry, with active mineral workings providing a fallback position if appropriate.

2.6 Agent of Change, safeguarding and the use of buffer zones

2.6.1 The NPPF, at paragraph 182 states:

'*Planning policies and decisions should ensure that new development can be integrated effectively with existing businesses and community facilities (such as places of worship, pubs, music venues and sports clubs). Existing businesses and facilities should not have unreasonable restrictions placed on them as a result of development permitted after they were established. Where the operation of an existing business or community facility could have a significant adverse effect on new development (including changes of use) in its vicinity, the applicant (or 'agent of change') should be required to provide suitable mitigation before the development has been completed.*'

2.6.2 Representation from, *inter alia*, the Mineral Products Association (the 'MPA'), requests that the agent of change principle is written into policies of the MWLP, in conjunction with stated buffer zones. Representations also consider that reference to buffer zones within policy represent best practice, with the MPA suggesting that buffer zones should be applied both around the safeguarded area, and then again to indicate a further zone within which the agent of change principle would continue to apply.

2.6.3 The concept of protecting the existing development has been present in minerals (as safeguarding) and waste[10] for some time. However, the July 2018 published version of the NPPF was the first time the concept was applied to all other developments.

2.6.4 The approach developed for safeguarding, and the decision not to pursue buffer zones, is set out from paragraph 2.2.30 of the Spatial Context and Sites Report. There has been no new evidence suggested in response to the Draft MWLP 2018 to demonstrate that this should change. The MPA refers to guidance produced by the British Geological Survey 'Mineral safeguarding in England: good practice advice.' This has been reviewed in preparing the P'Draft MWLP, and was also a reference in preparing the Draft MWLP 2018.

2.6.5 The concepts of safeguarding (both minerals and waste assets) is well-established and the 'agent of change' principle is clearly set out in the NPPF. In simple terms, it should not be necessary to repeat these within the MWLP. Further, the decision not to include buffer zones within the MWLP is considered to be sound.

2.6.6 However, it is clear that these are issues that do concern the minerals industry and so policy M2 has been amended to incorporate the agent of change text presented in the NPPF. This is considered appropriate text to address the potential for non-minerals development to adversely affect minerals resource, infrastructure and workings without relying on a fixed distance buffer zone.

2.6.7 It has also been incorporated into policy W1, to ensure adequate protection for existing waste infrastructure.

2.6.8 In addition, policy M2 has been amended to include explicit reference to associated infrastructure.

2.7 Presentation and use of data in the site assessment

Introduction

2.7.1 The Spatial Context and Sites Report was one of documents accompanying the Draft MWLP through consultation. Representations were received in response to the sites proposed to be allocated (as set out in Annex A to the Draft MWLP 2018).

2.7.2 Whilst limited objection was made in relation to the sites proposed to be allocated, and none was received in relation to those that were discounted through the site assessment, substantial comment was received in relation to the site assessment work that had been undertaken. Representations have been made as both: detailed comment in relation to specific sites, for example to identify that a feature had not been considered in enough detail;

[10] Currently expressed at paragraph 8 of National Planning Policy for Waste, but was originally present in Planning Policy Statement 10 that was first published in 2005.

and overarching comment in relation to the level of detail and analysis provided within the site assessment.

2.7.3 The limestone quarries (Leinthall and Perton) and their proposed extension were the subject of most site specific comment; although the Environment Agency commented in some detail across all the sites.

2.7.4 Historic England submitted a detailed response that sought greater detail regarding the analysis undertaken on those sites, principally focussing on nearby heritage assets and how resultant impacts from development at each of the proposed sites could be mitigated effectively. A meeting was held with Historic England on 25 June 2018 that discussed each of the matters raised.

2.7.5 In addition, the Draft MWLP representations included a new site proposed for mineral extraction. This site has been subjected to the same analysis as the sites discussed in the Spatial Context and Sites Report.

The Supplementary Sites Report

2.7.6 As a result of both the meeting with Historic England and reviewing all the consultation representations received, it was decided that additional work should be undertaken to supplement the site assessment. This work was focussed on the sites proposed to be allocated; no objections had been received in relation to those that had been discounted and there was nothing to suggest that the approach of the site assessment was flawed, more that additional information should be used to evidence the suitability of those that were proposed to be allocated, to demonstrate that it was reasonable to assume that their constraints could be overcome.

2.7.7 Work has been undertaken to:

- review all data held on the sites, including boundaries;
- address comments made on the sites proposed to be allocated in the Draft MWLP 2018;
- assess the new site proposed at Arrow Green; and
- review the potential impact of the sites on the night sky.

2.7.8 This work is presented in the Supplementary Report to the Spatial Context and Sites Report (the 'Supplementary Sites Report'). The Supplementary Site Report demonstrates that each of the sites proposed to be allocated remain suitable for allocation' albeit with some amendments made to site boundaries; it is reasonable to expect that an appropriate development proposal can be delivered at these locations.

2.7.9 The additional work has informed a review of all the key development criteria and incorporated some new matters, principally in relation to the protection of dark skies. The dark skies of Herefordshire are considered to be an element of local distinctiveness, important to the landscape of the county. Consequently, it should be incorporated as one of the considerations for minerals and waste development at the appropriate part of the MWLP.

2.7.10 Sections 4 and 5 of this Report consider how these sites will deliver the forecast level of need calculated in the latest need assessments.

2.7.11 The new site proposed at Arrow Green was concluded to not be appropriate to allocate, and is not considered further.

Updates to the MWLP

2.7.12 There are four key changes made the MWLP as a result of this work:

- Site M03c has been removed from the MWLP as an allocated site. It had been included in the Draft MWLP in error and upon careful review, it was concluded that as a least preferred option in this area it should not be allocated.
- Site M05g, a new area of working located to the east of Wellington Quarry, has been reduced in size to protect the setting of the Church of St Mary, in Marden.
- All of the key development criteria have been reviewed and updated, to incorporate both detail from the Supplementary Sites Report but also consultation representations where appropriate.
- Policy/supporting text has been reviewed and updated, for example clarifying the expectations in regard to phased working and making clearer the potential need to prioritise different environmental aspects, eg restoration to an historic landscape rather than flood alleviation.

2.8 Environment Agency

2.8.1 In addition to its comments on the site assessment evidence base, the Environment Agency also commented on other aspects of the Draft MWLP 2018, particularly in regard to:

- restoration plans;
- infrastructure resilience;
- terminology;
- landfill mining;
- agents of change; and
- presumption against stockpiling
- other - increased reference to Environment Agency resources including the Catchment Data Explorer, conventional and unconventional hydrocarbons; resource audit, waste to Doncaster

Restoration plans

2.8.2 It is recognised that restoration achieved through backfilling with waste has the potential to have a detrimental effect. The deposit of waste is subject to planning and any proposal will be considered in detail on submission of an application. Consideration of that application will include consultation with the Environment Agency. The MWLP only promotes the use of inert wastes for site reclamation, this is primarily as use of this waste stream will reduce the likelihood of detrimental effects occurring.

2.8.3 The MWLP is not able, of itself, to require reclamation of sites that are closed or have ceased quarrying and left. The approach of the MWLP is to present the policy expectations for site reclamation, seeking schemes that will deliver green infrastructure priorities on a landscape scale. The text presented by the Environment Agency within its representation is useful and has been incorporated into the P'Draft MWLP.

2.8.4 The MWLP recognises the regulatory regime delivered through Environment Permits and encourages developers to follow a twin track approach.

Infrastructure resilience

2.8.5 The Environment Agency requests that consideration is given to contingency planning '*for the most "at risk" waste streams to ensure operations are not significantly disrupted and business continuity is maintained*.' The representation does not specify which waste streams are considered to be at risk.

2.8.6 Contingency planning per se is not readily within the remit of the MWLP. However, the MWLP is seeking to improve resilience within the county through promoting development, encouraging more facilities to be built at appropriate locations, across the waste hierarchy.

2.8.7 The Waste Need Assessments have been undertaken to identify the range of facilities required across Herefordshire, taking into account local circumstances. The MWLP seeks to provide multiple location options for facility types higher up the waste hierarchy, with decreasing options available to facility types lower down the waste hierarchy, and none available for non-inert waste disposal.

2.8.8 The MWLP is primarily a land use document, directing new development, and so aimed at developers rather than to bring about cultural (personal) change. Through policy such as SS8 it places greater responsibility on all to engage in more sustainable waste/resource management.

Terminology

2.8.9 The Government's 25 Year Environment Plan[11] and Resources and Waste Strategy[12] have been reviewed in preparing the P'Draft MWLP.

2.8.10 The language of the MWLP has been reviewed to ensure it is clear, but there remains reference to all of the following terms: waste management; waste hierarchy; and circular economy.

2.8.11 The MWLP has been prepared seeking to deliver the circular economy, albeit has to be recognised that the policy document has a limited scope in achieving this aim. Not least, the ability to deliver facilities that will stimulate demand for recovered waste materials/ promotion of manufacturing is beyond the remit of MWLP. It is a land use document, that presents policy such as SP1 to influence material use and design, but ultimately cannot be responsible for achievement of the circular economy within Herefordshire. Instead, it can, and does, promote a range of waste management development to treat waste in a range of different ways to respond to market demand. That market may be anywhere; it may not be in Herefordshire.

2.8.12 Further, the spatial strategy of the MWLP follows that of the Core Strategy to enable greatest potential for connections between sectors. The Core Strategy promotes growth in the market towns, which will include manufacturing, although not all of the demand for new materials will be within Herefordshire. This approach has been developed following discussion with

[11] A Green Future: Our 25 Year Plan to Improve the Environment, 2018 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/693158/25-year-environment-plan.pdf

[12] Our Waste, Our Resources: A Strategy for England, 2018 https://www.gov.uk/government/publications/resources-and-waste-strategy-for-england

relevant organisations within Herefordshire (as presented in the Preparing the Draft Plan Report 2018, section 6.3).

2.8.13 The MWLP is deliberately technology neutral and does not specify the type of facility expected to achieve each element of the waste hierarchy, unless appropriate to do so, for example on farm anaerobic digestion. In principle all types of facility can be accommodated at the locations as proposed within the MWLP, it will then be for the applicant to demonstrate an acceptable form of development.

2.8.14 The food miles concept is not readily applicable to waste. The further that food is transported to be consumed simply results in increased burdens. However, waste may travel further to reach a more advantageous outcome, resulting in a benefit overall. A range of opportunities have been presented within Herefordshire in the MWLP, but it also recognise that markets will exist beyond the county.

Landfill mining

2.8.15 The Environment Agency queried whether a policy on landfill mining would be appropriate, either to tackle legacy pollution issues, or to recover resources and subsequently realise void for difficult wastes.

2.8.16 This suggestion has been considered in some detail, through desk based research with two areas of focus: literature review (European and national); and landfill legacy review (local). The full report is presented at Annex A to this Report.

2.8.17 The literature review demonstrates that there is potential for some important resources to reside in old landfill sites, and that the technical capability to extract these resources, safely, is developing.

2.8.18 However, it is also clear that there remains substantial barriers to landfill mining, and there is little evidence to suggest that this will become a substantial market in the foreseeable future, or at least within the plan period of the MWLP.

2.8.19 Research of the historic landfill sites within Herefordshire indicates only one location at which further research would be appropriate; and this concluded that the site was not appropriate and that there was no interest in it for mining. There is little evidence that there is any interest for landfill mining to occur in Herefordshire.

2.8.20 The research undertaken has been high level, however it is considered to be both proportionate and credible. On the basis of this research, there is little evidence that such development would be appropriate to promote or even that it would be deliverable.

2.8.21 In conclusion, it is not considered necessary or appropriate to have a policy for landfill mining in the MWLP.

Presumption against stockpiling

2.8.22 The Environment Agency has identified incidents of large scale waste stockpiling, '*mainly of baled wastes in Staffordshire and at other locations around the country.*' Further, that '*Herefordshire benefits from extensive areas of open land that could be used for storage*.'

2.8.23 Flytipping, the practice of dumping rubbish at an unauthorised location, is recognised to be a problem nationally. The National Fly-Tipping Prevention Group[13] reports that in 2017/18,

[13] http://www.tacklingflytipping.com/keystatistics/1494 [26.09.2019@14:08]

local authorities dealt with just under 1 million fly tipping incidents, which represented a slight decrease of 1% from those reported in 2016/17. The website advises that two-thirds of these incidents involved household waste and that the most common place for fly tipping to occur was on highways.

2.8.24 Hendeca's research found that there are reported incidents of unauthorised storage of wastes within the West Midlands, with the closest being at Kidderminster in Worcestershire.[14] However, Kidderminster is very much closer to Birmingham, the M5 and the M42.

2.8.25 Within Herefordshire neither fly tipping nor the unauthorised storage of waste are considered to be material problems. The number of fly-tipping incidents is considered to be low when compared to larger cities. There is no knowledge of any large scale waste storage within Herefordshire that is not otherwise associated with some other permitted activity, or at a site with the appropriate Environmental Permit.[15]

2.8.26 Herefordshire Council's contractors (Balfour Beatty) receive all fly tipping reports, with somewhere in the region of 600 to 700 each year. Where evidence is found that will link the waste to the owner, then the case is passed to Herefordshire Council for investigation. Herefordshire Council typically deals with 30 to 40 incidents each month, but this changes throughout the year. A greater number of incidents are experienced during Summer/Autumn than Winter or Spring, primarily due to gardeners/hedge cutters dumping green waste following the work undertaken for home owners. Due to less vegetation growth in Winter and early Spring there is less cutting work, with the result of less fly tipped waste.

2.8.27 The other fly tipping that typically occurs is informal waste collection services, colloquially termed 'cash paid one man and a van'. These individuals will collect rubbish and fly tip it rather than treat or dispose of it at an authorised location. However, any deposit greater than 20 tonnes is automatically referred to the Environment Agency to deal with under the relevant environmental legislation. '*Due to the sheer nature of Herefordshire and being so rural, often people are extremely vigilant to new faces / vehicles and will report strange goings on if anything is seek to be out of the normal day to day. Because of this, waste build ups are often reported before they get out of hand.*'[16]

2.8.28 At the time of writing (October 2019) Herefordshire Council was dealing with a farmer who had imported hazardous waste (asbestos) onto his farm and then infilled land with that waste. However, this was given as a rare example.

2.8.29 There is no evidence to suggest that either fly tipping or the unauthorised storage of waste is a significant problem in Herefordshire. Further, as an illegal activity there is already a well-established legislative and regulatory framework in place.

2.8.30 The storage of wastes as a part of another development is satisfactorily managed through existing planning controls. Where stockpiling is proposed as part of a development proposal, conditions are used to control this activity, for example requiring a Construction Environmental Management Plan to be submitted, incorporating a Waste Management Plan.

[14] https://www.gov.uk/government/news/businessman-jailed-for-running-three-illegal-waste-sites [15.10.2019@16:22]

[15] Pers. comm. Craig Sandman, Principal Community Protection Officer; Rebecca Jenman, Principal Planning Officer (Minerals and Waste)

[16] Pers.comm. Craig Sandman, Principal Community Protection Officer, October 2019

2.8.31 Neither Environmental Protection and Planning Officers at Herefordshire feel that a policy would be either appropriate or necessary. '*I have been doing this job for over ten years now and I would say you don't need a policy on waste storage by unscrupulous people.*'[16] In addition, there was a concern that such a policy may even look like an encouragement for applications for the stockpiling of waste, which is not something that would be desirable.[17]

2.8.32 Document titled 'A consultation on proposals to tackle crime and poor performance in the waste sector & introduce a new fixed penalty for the waste duty of care'[18] (January 2018) states that the '*UK government has allocated an extra £30 million to the Environment Agency for the next four years on top of the £23 million allocated in the 2015 Spring Review. This funding is specifically for tackling waste crime in England, to ensure the Environment Agency have the resources needed. We have given local authorities the power to issue fixed penalty notices for small-scale fly-tipping, as well as powers to seize and crush vehicles involved, and worked with HMRC to tackle Landfill Tax fraud. Sentencing guidelines for those convicted of waste crimes, including fly-tipping, have been tightened up recently.*' (Executive Summary, paragraph 8)

2.8.33 The feedback following that consultation advises, under the title 'We Did':

'*Legislation laid in parliament takes the first step of putting these proposals into practice including a new requirement for all waste facilities to have a written management plan, requirements to demonstrate adherence to a technical competence scheme and new fixed penalties introduced for the household waste duty of care. We remain committed to reform the exemptions regime to prevent their use for hiding illegal activity and will publish a supplementary government response setting out the proposed changes, ahead of introducing legislation to implement them.*'[18]

2.8.34 These statements indicate that the Government recognises the risks from waste crime and has identified, and started to put in place, solutions to it; none of these place the planning system at the forefront.

2.8.35 The MWLP should be positive, actively promoting the delivery of desired development at preferred locations. It cannot cater for all eventualities and should not have policy that is written in the negative. Further, fly tipping and the storage of waste without permission are not lawful in planning terms and are otherwise illegal activities. There is a robust regulatory framework already in place that would be appropriately supported by policy of both the Core Strategy and MWLP, should enforcement be expedient.

2.8.36 A presumption against stockpiling policy as suggested by the Environment Agency is not considered to be necessary or appropriate.

Other

2.8.37 The P'Draft MWLP has been amended to supplement reference to the Environment Agency's on-line resources.

2.8.38 The P'Draft MWLP does not promote the extraction of either conventional or unconventional hydrocarbons. The NPPF does not promote the extraction of coal, whilst the change in

[17] Pers.comm. Rebecca Jenman, , Principal Planning Officer (Minerals and Waste), November 2019

[18] https://consult.defra.gov.uk/waste/crime-and-poor-performance-in-the-waste-sector/ [15.10.2019@16:38]

approach in relation to unconventional hydrocarbons has been presented above, at section 2.3. The PEDL Block SO51a is not active and a license has not been granted.

2.8.39 The P'Draft MWLP supplementary text has been amended to include reference to major developments that are not new build, such as substantial refurbishment.

2.8.40 Waste was sent to Doncaster for incineration. The Waste Need Assessments are a part of the evidence base required to understand waste arisings, movement and implications for policy development. The MWLP sets out a range of new opportunities for waste management facility development to provide greater opportunities in the county. A new Waste Need Assessment has been completed, incorporating data from 2018.

2.9 Historic England

2.9.1 In addition to its comments on the site assessment evidence base, Historic England also commented on other aspects of the Draft MWLP 2018, particularly that:

- the Plan does not demonstrate a positive approach to the historic environment as required by National Planning Policy Framework ('NPPF') paragraph 185;
- reliance upon Core Strategy policy with the proposed MWLP policies was not sufficient to ensure the historic environment can be sustained in line with NPPF requirements;
- additional guidance documents prepared by Historic England should be referenced within the MWLP.

2.9.2 NPPF paragraph 185[19] requires local plans to '*set out a positive strategy for the conservation and enjoyment of the historic environment …'* taking into account four matters:

a) the desirability of sustaining and enhancing the significance of heritage assets, and putting them to viable uses consistent with their conservation;

b) the wider social, cultural, economic and environmental benefits that conservation of the historic environment can bring;

c) the desirability of new development making a positive contribution to local character and distinctiveness; and

d) opportunities to draw on the contribution made by the historic environment to the character of a place.

2.9.3 Each of these are addressed in the Draft MWLP 2018 and are continued, and reinforced, within the P'Draft MWLP.

2.9.4 The overarching strategy presented within Core Strategy is the starting point for the MWLP. The policy framework presented within the Core Strategy extends beyond policy LD4, to include:

- the spatial strategy addressing issues at the landscape scale, including policy SS6;
- Policy HD2 seeking to enhance and protect heritage assets in tandem with new development; and
- Policy LD1 addressing historic elements in the landscape and townscape.

[19] Both in the July 2018 and February 2019 publications

2.9.5 Being supplemented by the MWLP, for minerals and waste development, there is, inherently a positive strategy presented for the conservation and enjoyment of the historic environment. Not least. the MWLP has been prepared to enable the provision of sandstone and other minerals that are required to maintain built heritage assets within Herefordshire and beyond.

2.9.6 At paragraph 3.90, the Core Strategy makes clear the desirability of sustaining and enhancing the significance of heritage assets. This is repeated in the Vision and Objectives (particularly Objective 12) of the P'Draft MWLP and delivered through the identified policies, including the early restoration of sites (P'Draft MWLP policy SP4). The Strategic Policy and General Principles section of the P'Draft MWLP considers movement and transportation requirements associated with minerals and waste sites, including that access arrangements and pipe/conveyor routes should avoid damage to heritage assets.

2.9.7 Paragraphs 3.90, 3.99 and 4.20 of the Core Strategy identify the wider social, cultural, economic and environmental benefits that conservation of the historic environment can bring. This too is promoted within the MWLP, for example supporting text to policy SP2 (formerly OS4) has been supplemented to include reference to heritage assets alongside archaeological and geodiversity. In addition, the key development criteria and P'Draft MWLP policy SP4 (formerly SD5) incorporate consideration of heritage assets.

2.9.8 Paragraphs 3.94 and 4.26 of the Core Strategy make clear the desirability of new development making a positive contribution to local character and distinctiveness. Paragraphs 3.89, 4.26 and 4.27 address the contribution made by the historic environment to the character of a place. These priorities are continued through the MWLP, principally through the potential for restoration schemes to be delivered at the landscape scale and incorporating priorities for heritage assets. In addition, the key development criteria require proportionate assessment of impacts on heritage assets from the proposed development, this assessment should also include identifying opportunities to enhance significance and make a positive contribution to local character and distinctiveness.

2.9.9 It is considered that the MWLP, read alongside the Core Strategy, provides a positive strategy for the historic environment and that this approach, is sufficient to ensure the historic environment can be sustained in line with NPPF requirements. Further, it is considered that this approach will enable both the historic environment and heritage assets within Herefordshire to be improved.

2.9.10 The P'Draft MWLP has been amended to supplement reference to Historic England's guidance.

Updates made in September 2020

2.9.11 Historic England generally recognised that many of its previous comments had been addressed within the draft P'Draft MWLP on which it had provided informal comment. However, it still retained some concern, particularly in regard to ensuring heritage assets would receive an appropriate level of consideration and would not be lost amongst a number of other environmental considerations.

2.9.12 The P'Draft MWLP has been reviewed with specific reference to the historic context added where appropriate, but without focussing on this topic to the detriment of others. In particular, it was recognised that the section in the P'Draft MWLP addressing reclamation would benefit from the explicit recognition that there may be conflict between priority areas, for example flood risk and historic landscape; relevant text has been added to this effect.

3. Phosphates in the River Wye SAC

3.1 Introduction

The River Wye SAC

3.1.1 Both the rivers Wye and Lugg are designated as Sites of Special Scientific Interest. In addition, the River Wye, and the lower stretches of the River Lugg, are designated as the River Wye Special Area of Conservation (SAC). Phosphate levels within the River Wye SAC are known to be exceeding the conservation objectives set by Natural England for the designated site.

3.1.2 In May 2014, the River Wye SAC NMP was published. Pages 2 and 3 of the NMP set out the specific aims of it, which can be summarised as enabling ' … *economic growth and development within the Wye catchment Valley whilst also protecting the integrity of the site, in line with the requirements of the Habitats Directive and Habitats Regulations*, …'. (River Wye SAC NMP, page 2).

3.1.3 The River Wye Nutrient Management Plan Board was established to identify and deliver actions that achieve the phosphorous conservation target of the River Wye SAC, primarily through the delivery of the River Wye SAC NMP. Minutes of the Board meetings are available on Herefordshire Council's website and have been referenced in preparing the MWLP.

The Dutch Case

3.1.4 In November 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.

3.1.5 In July 2019, Natural England wrote to Herefordshire Council referencing the Dutch Case (Annex B). Natural England's understanding of the Dutch Case '*is that where a site is failing its water quality objectives or its ecological objectives due to water quality and is therefore classed as in an unfavourable condition, there is limited scope for the approval of further additional damaging effects*.' (NE Letter, 22 July 2019, page 1)

3.1.6 Natural England's July letter subsequently concludes:

'*Natural England and Herefordshire Council's thinking to date has been that development in the River Lugg catchment can proceed, even when it might add to the existing Phosphate levels in the river. This is because the Nutrient Management Plan for the River Wye SAC provides a framework for reducing Phosphate levels down to the target level by 2027 (in line with Water Framework Directive targets). However, the Dutch case has prompted us to rethink our position with regards to planning casework within the Lugg catchment. We are unable to respond to casework in the Lugg catchment in the short term, whilst we seek guidance from national specialists and our legal team regarding our position on proposals that are not phosphate neutral or ecologically inconsequential.* ' (NE Letter, 22 July 2019, page 2)

3.1.7 The July letter also advises Herefordshire Council to gain legal opinion on the Dutch Case and to form a view on the correct approach in determining planning applications, including consideration of '*whether the Nutrient Management Plan gives enough 'certainty' around mitigation measures to allow it to be relied upon in Habitats Regulation Assessment.*'

3.1.8 Natural England wrote to Herefordshire Council again in August 2019 (see Annex B) this time stating that *'... in our view, reasonable scientific doubt remains as to whether the Nutrient Management Plan can provide appropriate mitigation.*' (NE Letter, 05 August 2019, page 1)

3.1.9 Herefordshire Council subsequently prepared a Position Statement titled 'Current Development in the River Lugg catchment Area' dated 15 October 2019. This was updated in March 2020 by document titled 'Position Statement – Development in the River Lugg Catchment Area' (the 'River Lugg Position Statement', Annex C). Page 2 of that Position Statement advises:

'*The River Lugg is a tributary of the River Wye SAC, and forms part of the SAC from Hope under Dinmore. The River Lugg catchment covers predominantly the north of the Herefordshire administrative area (refer to plan). The River Lugg is currently exceeding its limits for phosphates, as a result of water pollution from both 'point' source (in particular sewage outlets) and 'diffuse' source (in particular agricultural run-off).*'

3.1.10 The River Lugg Position Statement refers to the River Wye SAC NMP, explaining that its purpose was to reduce phosphate levels in the River Wye SAC through '*a combination of discharge reductions from waste water treatment works, land use change and changes to agricultural practice...'*. Page 1 of the Position Statement concludes '*At the time, this was adequate to allow the council to adopt its Core Strategy and to allow development proposal to proceed, however this is no longer the case.'* It is recognised that the River Wye SAC NMP will need to be reviewed, although no timetable is set out for this work.

3.1.11 As an interim approach, the River Lugg Position Statement sets out (at page 3) the potential for a positive appropriate assessment that will enable development to proceed. This would be in a situation *'on Natural England's advice, where it can be demonstrated that development is* ***nutrient neutral*** *(where avoidance / mitigation measures included in the plan or project, counterbalance any phosphate increase from the plan or project), or would lead to '****betterment****'. Proposals will need to provide appropriate evidence for this.'*

3.1.12 The interim approach also includes advise in relation to drainage from fields in the red zone (shown on the plan accompanying the Position Statement, Annex C). This advice concludes that where a number of criteria are met, and there would no pathway for impacts, there would be no need for further Habitat Regulations Assessment.

3.1.13 Also in March 2020, Herefordshire Council published both 'Guidance Note and Checklist for applicants/agents relating to HRA and planning applications' and 'Frequently Asked Questions Relating to the Development in the River Lugg Catchment' (the 'FAQ 2020'). These documents are provided at Annex D.

3.1.14 The latter document (the FAQ 2020, on pages 1 and 2) presents guidance on what is meant by 'neutrality' and 'betterment':

'*What constitutes 'neutrality'?*

Put simply, 'nutrient neutrality' means that a plan or project would result in no net increase in the phosphate load being discharged to the river. This could be after controls at source, reduction by treatment, and/or offsetting measures.

Neutrality needs to be demonstrated with certainty, in order to show no adverse effects on integrity. We advise that a phosphate budget is calculated for new developments, showing the phosphate discharging from the site before and after development. This will show that the development either avoids harm to protected sites or provides the level of mitigation required to ensure that there is no adverse effect.

What constitutes 'betterment'?

'Betterment' is an improvement in the current situation regarding phosphate impacts, above and beyond neutrality as defined above.'

3.1.15 These documents, and any future amendments, have all been used in preparing the P'Draft MWLP and will be useful references for minerals and waste developments.

The purpose of this section

3.1.16 This Report does not replace the Habitats Regulations Assessment of the MWLP, which is yet to undertaken at the time of writing this section (October 2019 and updated March 2020). Recommendations of the Habitats Regulations Assessment (along with those of the SFRA and Sustainability Appraisal) will be considered separately.

3.1.17 This section has been prepared simply to work through the relevant matters and to set out the approach used in preparing the P'Draft MWLP. It is presented without prejudice to the Habitats Regulations Assessment.

3.2 Preparing the MWLP

Overview

3.2.1 The preparation of any local plan is undertaken with an objective of having no likely significant effect on a designated site. In addition, the local concern regarding phosphate levels in the River Lugg within Herefordshire has been understood since the start of preparing the MWLP. The starting point for preparation of the MWLP has been to seek to avoid the likelihood of having any adverse effect, but also to seek to deliver policy that would help to improve the condition of the designated site.

3.2.2 This outcome has been sought through a number of different routes including:

- the site analysis has recognised and considered the potential for impact on designated sites;
- key development criteria have been developed as relevant;
- policy has been drafted seeking to achieve improved reclamation of sites, incorporating green infrastructure priorities that reflect local conditions;
- policy has been drafted to address the management of agricultural wastes; and

- incorporating recommendations from the HRA Screening Report [20] and a commitment to incorporate recommendations from the Habitats Regulations Assessment yet to be completed.

3.2.3 As reported at section 7.2 of the Preparing the Draft Plan Report 2018 the HRA Screening Report concluded that the Draft MWLP 2018 could result in likely significant effects on the River Wye Special Area of Conservation (SAC) through physical damage and loss of habitat, non-physical disturbance, water quality impacts and non-toxic contamination. The HRA Screening Report concluded that these effects would require further consideration by the Appropriate Assessment to determine whether, in light of any mitigation and avoidance measures, they will result in adverse effects on the integrity of the above sites either alone or in-combination with other plans and projects.

3.2.4 The HRA Screening Report also set out a number of recommendations for the Draft MWLP 2018, all of which were considered in the Preparing the Draft Plan Report 2018. Those recommendations that were additional to the measures already present within either the adopted Core Strategy or the Draft MWLP 2018 were incorporated into the Draft MWLP 2018 prior to it being made available for consultation.

The Dutch Case

3.2.5 The Dutch Case prompted Natural England to change its advice to Herefordshire Council in relation to phosphate in the River Wye SAC, as explained at paragraph 3.1.5 above. This change in Natural England's position has prompted a review of the intended content of the MWLP; the change in advice provided by Natural England and the updated Position Statement and guidance prepared by Herefordshire Council (Annexes B, C and D) become new elements of the evidence base relevant to the MWLP.

3.2.6 Annex 1 of Natural England's August letter, sets out the live planning consultations on which the organisation is unable to agree that there would be no adverse effects on integrity. The Annex lists 22 consultations, the vast majority of which are in relation to development proposals or development plans that would promote housing (including holiday accommodation). It also identifies three commercial development types and two development proposals in relation to agriculture/food production, including retention of a mobile home associated with one of the businesses.

3.2.7 The focus (within Annex 1) on dwellings is not surprising. The River Wye SAC NMP identifies 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.*' (River Wye SAC NMP, section 4, page 27).

3.2.8 In June 2019, Natural England published a document titled 'Advice on achieving nutrient neutrality for new development in the Solent region, for Local Planning Authorities' ('NE Solent Region Advice')[21]. Whilst prepared for a different administrative and catchment area than the River Wye SAC, the NE Solent Region Advice addresses a very similar problem, namely high levels of nitrogen and phosphorus in the Solent water environment which is

[20] Habitats Regulations Assessment for the Herefordshire Minerals and Waste Local Plan, LUC, November 2018
[21] https://www.havant.gov.uk/sites/default/files/documents/SolentNutrientAdviceV2June2019.pdf [22.10.2019@14:27]

similarly protected under the Conservation of Habitats and Species Regulations. Paragraph 3.9 of the NE Solent Region Advice concludes:

'*The high levels of nitrogen and phosphorus input to the river environment is currently caused by wastewater from existing housing and agricultural sources*.'

3.2.9 Whilst, the NE Solent Region Advice is slightly different from that being given in Herefordshire, in that it focusses on nitrogen as well as phosphate, the principles set out are considered to be relevant. This includes the principle of seeking to achieve nutrient neutrality, with an approach to measuring this outcome set out in the NE Solent Region Advice.

3.2.10 At paragraphs 4.4 to 4.7, the NE Solent Region Advice sets out the types of development that can be considered for nutrient neutrality:

'*4.4 This methodology is for all types of development that would result in a net increase in population served by a wastewater system, including new homes, student accommodation, tourism attractions and tourist accommodation. This development will have inevitable wastewater implications.*

4.5 Other commercial development not involving overnight accommodation will generally not be included. It is assumed that anyone living in the catchment also works and uses facilities in the catchment, and therefore wastewater generated by that person 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.

4.6 Tourism attractions and tourism accommodation are exceptions as these land uses as they attract people into the catchment and generate additional wastewater and consequential nitrogen loading on the Solent. This includes self-service and serviced tourist accommodation such as hotels, guest houses, bed and breakfasts and self-catering holiday chalets and static caravan sites. Other applications will be considered on their individual merits, for example new cruise ship facilities etc.

4.7 There may be cases where planning applications for new commercial or industrial development or changes in agricultural practices could result in the release of additional nitrogen into the system. In these situations, a case-by-case approach will be adopted. Early discussions with Natural England via our chargeable services (DAS) are recommended.'

3.2.11 The focus of the NE Solent Region Advice and Natural England's advice to Herefordshire Council are very similar, both focussing on wastewater from dwellings (and similar overnight accommodation or additional people attractors) and agriculture.

Implications for the P'Draft MWLP

3.2.12 Natural England's August letter states:

Plans or projects that are able to show betterment or nutrient neutrality may be permitted. Betterment in this context would mean certainty that the proposal is not adding to the Phosphate levels within the river, and that permitting it does not make it harder to achieve the Phosphate targets. Natural England would be able to advise on this on a case by case basis if required.'

3.2.13 Consequently, preparation of the P'Draft MWLP has focussed on how it, as a land use policy document, can contribute to achieving betterment and/or nutrient neutrality.

3.2.14 The MWLP is not a land use policy document to promote either housing or tourism. Consequently, these sectors are not necessary to consider further.

3.2.15 Minerals and waste projects, including waste water infrastructure, can reasonably be described as commercial development. In addition, minerals and waste projects experience change over time and can also involve a change in agricultural practice, for example where a former agricultural field is developed for mineral extraction or waste infrastructure.

3.2.16 The role of the MWLP in regard to agricultural waste has been set out in the Preparing the Draft Plan Report 2018 (from paragraph 2.6.29) and section 2.4 of this Report. Whilst the MWLP is not a land use policy document to promote agricultural development, it is intended to have a role in influencing the management of wastes from agricultural units within Herefordshire.

3.2.17 Consequently, this Report considers the emerging policies of the MWLP relevant to the following matters:

- waste water management;
- minerals and waste projects; and
- agricultural waste.

3.3 Waste water management

Introduction

3.3.1 An overview of waste water management is presented at section 5.4 of the Preparing the Draft Plan Report 2018. At that time, both Severn Trent and Welsh Water confirmed that they did not have development projects that would benefit from a specific policy framework within the MWLP. Consequently, policy W4 was not amended significantly, other than to encourage the recovery of biogas.

3.3.2 This section presents further research undertaken to prepare the P'Draft MWLP. It begins by describing the overall planning policy framework for wastewater infrastructure and wastewater management which guides local plan-making. It then describes the regulatory and policy drivers outside of the planning framework that are acting on water companies, showing how Severn Trent Water and Dwr Cymru/Welsh Water are required to take action on phosphate management independent of the planning system and identifies what those actions are. It goes on to identify the likely infrastructure works that the water companies will need to undertake in order to meet the required water quality standards and describes how this needs to be addressed in the P'Draft MWLP.

3.3.3 The available evidence suggests that the key issue in Herefordshire, in regard to wastewater management, is the release of phosphate and the need to lower this below the current consented levels. However, it is not clear how this will be achieved.

The planning policy framework

3.3.4 The NPPF (at paragraph 20) advises that strategic policies should '*set out an overall strategy for the pattern, scale and quality of development, and make sufficient provision for: … infrastructure for … wastewater … .*'

3.3.5 National Planning Policy Guidance advises (at Paragraph: 005, Reference ID: 34-005-20140306, Revision date: 06 03 2014) that '*Plan-making may need to consider: identifying suitable sites for new or enhanced waste water and water supply infrastructure*.'

3.3.6 At Paragraph 007 (Reference ID: 34-007-20140306, Revision date: 22 07 2019), National Planning Policy Guidance advises that:

'Plan-making may need to consider:

- *the sufficiency and capacity of wastewater infrastructure*
- *the circumstances where wastewater from new development would not be expected to drain to a public sewer*
- *the capacity of the environment to receive effluent from development in different parts of a strategic policy-making authority's area without preventing relevant statutory objectives being met.'*

3.3.7 In 2018, the Government published 'A Green Future: Our 25 Year Plan to Improve the Environment' (the '25 Year Environment Plan'). Goal 8 of the 25 Year Environment Plan is to '*minimise waste, reuse materials as much as we can and manage materials at the end of their life to minimise the impact on the environment. We will do this by: Working towards our ambition of zero avoidable waste by 2050*.' (page 29) 'Avoidable' is described as meaning what is technically, environmentally and economically practicable; this is a target that applies to waste water, not just solid waste.

3.3.8 There is therefore, alongside the regulatory framework established beyond the planning system, a role for planning policy in the development of wastewater management facilities.

Regulation of wastewater management facilities beyond the planning system

3.3.9 Wastewater management is highly regulated beyond the planning system. '*The water and sewerage sectors in England and Wales have to comply with several different Acts of Parliament and European Directives. The legislation covers the following broad areas*:

- *economic regulation of the sector;*
- *water supply;*
- *sewerage services;*
- *drinking water quality;*
- *environmental standards;*
- *customer service; and*
- *flood and drought protection and adaptation*.'[22]

3.3.10 The water industry is therefore subject to regulation from a number of different parties including:

- European Union – setting European water, waste water and environmental standards;
- Defra – setting the overall water and sewerage policy framework in England;
- Ofwat – as economic regulator;

[22] https://www.ofwat.gov.uk/regulated-companies/ofwat-industry-overview/legislation/ [29.10.2019@10:14]

- Environment Agency – as environmental regulator;
- Drinking Water Inspectorate – as drinking water quality regulator;
- Consumer Council for Water – representing consumers, and investigating customer complaints that have not been satisfactorily resolved by water companies; and
- Natural England – the government's advisor on the natural environment, providing advice to protect and improve England's natural environment.

3.3.11 In short, since the water and sewerage industry was privatised in 1989, a wide ranging regulatory, monitoring and advisory framework has been in place to deliver environmental standards, sufficient capacity and a high standard of customer service at a fair price.

3.3.12 Whilst this all needs to work alongside the planning system, it is separate from it.

3.3.13 Ofwat, as the economic regulator of the water industry, sets the price, investment and service package that customers receive, looking to balance consumers' interests with the need to ensure the water industry is also able to finance the delivery of water and sewerage services and meet its other legal obligations. This package is reviewed every five years. Ofwat is currently working on the price review for 2019 (PR19), which will set wholesale price controls for water and sewerage companies for the period 2020 to 2025.

3.3.14 WISER[23] (Water Industry Strategic Environmental Requirements). WISER is the strategic steer to water companies on the environment, resilience and flood risk for business planning purposes, which all water companies are due to take account of when developing business plans for the period 2020-2025.

3.3.15 On page 13, WISER contains an information box that states

'*Phosphorus (P) is the most common reason for English water bodies not achieving their objectives. The concept of P stewardship focusses on making better use of this non-renewable resource whilst also protecting the environment. You are well placed to support more sustainable future management of P and we encourage you to view and manage P as a resource for potential recycling and/or recovery (for agricultural or other uses) as well as a pollutant to remove from sewage. More details in annex 3.*'

3.3.16 The first paragraph in WISER Annex 3 (provided at Annex E to this Report) advises that:

'*Some EU countries are moving to set obligations for recovery and/or recycling of P from wastewater. In England, P is one of our most challenging water quality pressures. P (rock) is also one of only 20 EU Critical Raw Materials based on economic importance and supply risk, used inefficiently in agriculture and not generally managed as a resource by the water industry. The UK is a big net importer of P. The amounts lost to the water environment and accumulating in soils each year exceed those in imported P fertiliser.*'

3.3.17 WISER Annex 3 requires water companies to put in place phosphate reduction measures to achieve increasingly ambitious levels, recognising that the '*type of treatment applied affects the degree to which P removed from wastewater can be recovered and/or useful recycled as biosolids to agricultural land'*. Consequently, water companies are encouraged to '*manage P*

[23] https://www.customer-panel.co.uk/media/1017/water-industry-strategic-environmental-requirements-wiser.pdf [24.10.2019:17:53]

as a resource for potential recycling and/or recovery (for agriculture or other uses) as well as a pollutant to remove from sewage.'

3.3.18 Annex 3 then sets out the sorts of actions that are encouraged to achieve this aim. These actions are predominantly research and technology focussed, rather than directly relevant to land use.

3.3.19 As the environmental regulator, the Environment Agency issued the third Water Industry National Environment Programme (WINEP3[24]) in March 2019. WINEP3 represents a set of actions requested of all 20 water companies operating in England to complete between 2020 and 2025, in order to contribute towards meeting their environmental obligations. WINEP3 is supported by WISER.

3.3.20 All water companies prepare a business plan presenting their proposed rolling 5-year capital investment programmes, known as an Asset Management Plans ('AMP'). The business plans for AMP7, covering the period 1st April 2020 to 31st March 2025, incorporate both the priorities of PR19 and the measures of WINEP3. Business plans for AMP7 were submitted to Ofwat for approval in September 2018. Severn Trent Water's submission was considered by Ofwat as ready to implement, and was awarded with fast-track status[25]. The business plans of both Severn Trent Water and Dwr Cymru/Welsh Water were approved by Ofwat in December 2019.

3.3.21 WINEP3 contains several measures for both Dwr Cymru/Welsh Water and Severn Trent Water assets, some of which are relevant to the release of phosphate into the River Wye SAC catchment. Most of the measures are in relation to improved monitoring, so as to ensure that the appropriate levels are being complied with.

3.3.22 However, in relation to the waste water treatment facilities at Eign, Kingstone and Madley, Leominster, Rotherwas and Weobley, all of which discharge into the River Wye operational catchment or to the Rivers Arrow, Lugg and Frome, specific measure HD_IMP is applied, as a primary driver. HD_IMP is the code for: '*Action is required to improve a site so as to contribute towards meeting conservation objectives of a Natura 2000 or Ramsar site*.'

3.3.23 At both Kingstone and Madley and Weobley waste water treatment works, a secondary driver of WFD_IMPg is applied, for phosphorus. WFD_IMP is the code for:

'*Measures to reduce ammonia, phosphorus, BOD or nitrogen at STWs in order to meet WFD standards in rivers, transitional or coastal waters. There may also be situations where a WFD biological element fails its water body objective due ammonia and/or dissolved oxygen (i.e. reason for not achieving good status (RNAG) is confirmed as ammonia and/or dissolved oxygen), but the ammonia and/or dissolved oxygen element at the designated monitoring location achieved good status. This may be due to circumstances such as different monitoring sites used for chemistry and biology. There must be a confirmed link between the water company asset and the observed effect for measures to improve biology.*'

3.3.24 The lower case suffix indicates what target the measure is aimed at achieving, or the status standard. The lower case 'g'; is used to indicate that the measure is to meet 'good' status.

[24] https://data.gov.uk/dataset/a1b25bcb-9d42-4227-9b3a-34782763f0c0/water-industry-national-environment-programme [24.10.2019@17:52]

[25] https://www.ofwat.gov.uk/regulated-companies/price-review/2019-price-review/draft-determinations/ [01.11.2019@11:39]

3.3.25 In addition, new legislation is being prepared intended to prevent phosphate use in products, so avoiding their release to waste water. Regulation (EU) No 259/2012 imposes a restriction on phosphates in domestic laundry and dishwasher detergents; the UK is currently considering how this will be transposed into UK law. Domestic regulation is necessary to implement a ban on inorganic phosphates in domestic laundry cleaning products, setting out the process for handling derogation applications and to provide for enforcement measures for any breach of Regulation 648/2004[26].

Strategic issues for the MWLP to address in relation to waste water infrastructure

3.3.26 Planning Policy Practice Guidance advises that '*plan-making may need to consider: the sufficiency and capacity of wastewater infrastructure*.'

3.3.27 The River Wye SAC NMP focusses on a particular aspect of the sufficiency of wastewater infrastructure, phosphate releases, and how this may be affected by population growth in the future. The River Wye SAC NMP does not comment on the capacity of waste water infrastructure, but is clear that phosphate levels within the River Wye SAC catchment are of concern.

3.3.28 Wastewater treatment works are identified as a key point source for phosphates, not least at paragraph 13.1.1 of the River Wye SAC NMP. Paragraph 13.1.3 further identifies that *'the biggest potential* [for addressing phosphate levels] *is held in addressing point source discharges*.' Paragraph 13.1.1 also presents mitigation measures that could reduce phosphate levels to within the conservation targets.

3.3.29 The River Wye SAC NMP is described (at paragraph 13.3) as '*the starting point in a long-term process*', and consequently its conclusions are somewhat uncertain. Measures to improve certainty are set out (at section 13.2.2) predominantly focussing on the viability and efficacy of future technologies. The associated studies are yet to be undertaken and the future projects at the wastewater treatment works are yet to be understood.

3.3.30 Discussion with Dwr Cymru/Welsh Water has identified the works proposed for AMP7 to address phosphate management and reduce emissions to the River Wye SAC. As part of their participation in the River Wye SAC NMP partnership, Dwr Cymru/ Welsh Water has undertaken a source apportionment investigation to identify which of its activities, and which of others, are impacting the rivers Wye and Lugg, and, where those impacts occur.

3.3.31 The outcomes of that investigation include the identification of where phosphorus reductions are needed to best achieve the environmental requirements within in the catchments of the two rivers.

3.3.32 In its AMP7, Dwr Cymru/Welsh Water proposes to undertake phosphorous removal at 11 of its wastewater treatment works ('WwTW') that discharge into the rivers Wye or Lugg. The five wastewater treatment works that are located within Herefordshire are:

- Hereford Eign WwTW;
- Hereford Rotherwas WwTW;
- Leominster WwTW;

[26] Regulation (EC) No 648/2004 of the European Parliament and of the Council of 31 March 2004 on detergents. https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32004R0648&from=EN [12.11.2019@11:14]

- Kingstone and Madley WwTW;
- Weobley WwTW.

3.3.33 Further to these facilities, Dwr Cymru/Welsh Water also proposes to undertake phosphorous removal at the Pontrilas WwTW. Whilst this facility is in Herefordshire, it does not discharge into the River Wye SAC.

3.3.34 Consequently, it is known where phosphate removal works will be focussed, although details on how that will be achieved are not currently available. Nevertheless, Dwr Cymru/Welsh Water considered it would be beneficial to present these proposed works within the MWLP[27].

3.3.35 In email correspondence from early November 2019, Severn Trent Water confirmed that none of the sewage treatment works operated by the company discharge within the River Wye SAC. Consequently, whilst its AMP7 Business Plan does include works to those facilities, they are not relevant to this discussion.

3.3.36 Appendix 3 of the 'Strategic Housing Land Availability Assessment, Rural Report[28] (March 2019) presents an update on water supply and waste water capacity information for both Severn Trent Water and Dwr Cymru/Welsh Water (Annex F). This information focusses upon capacity only; it does not present information in relation to environmental performance. It indicates that, generally, across both Dwr Cymru/Welsh Water and Severn Trent Water there is sufficient wastewater treatment capacity within Herefordshire.

3.3.37 The availability of additional capacity, or headroom, is variable throughout the lifetime of a wastewater treatment plant; consequently neither company is any more specific in its comment on capacity than as set out in the information at Annex F. 'Limited capacity' or 'DIA required' means that the developer is likely to be required to undertake an impact assessment, to demonstrate whether the intended treatment facility has sufficient capacity for the development proposed. 'No Capacity' indicates a location where the operator is likely to object to additional demand at that treatment plant. This may be resolved through the developer paying for the required reinforcement works, which will be determined by the specifics of both the proposed development and the wastewater treatment works. 'Grampian date of 2020' indicates those treatment plants that are due improvement works under Welsh Water's AMP6, and that developments are subject to a Grampian condition[29] that prevents connection until 2020.

Approach to waste water management infrastructure development

3.3.38 The source apportionment investigation by Dwr Cymru/Welsh Water updates the information present within the River Wye SAC NMP to identify specific locations at which phosphate removal will be undertaken. Dwr Cymru/Welsh Water has not provided full details about how that will be achieved, but if it requires development above ground this is likely to be subject to planning permission. Consequently, it is considered appropriate to identify these WwTW in the P'Draft MWLP.

[27] Discussion held with Ryan Norman, Leader Forward Plans Team, Dwr Cymru/Welsh Water, October/November 2019 and March 2020

[28] https://www.herefordshire.gov.uk/download/downloads/id/17370/shlaa_rural_report_march_2019.pdf Strategic Housing Land [01.11.2019:11:59]

[29] The Grampian condition is a facet of planning Scottish case law established by Grampian Regional Council v City of Aberdeen District Council 47 P&CR 633. It is a negatively worded condition used to prohibit development authorised by the planning permission until a specified action has been taken.

3.3.39 Severn Trent Water infrastructure does not release water into the River Wye SAC, and consequently no further policy framework is considered necessary.

3.3.40 Beyond addressing sufficiency in terms of phosphate levels, Dwr Cymru/Welsh Water also requested further advice be included in the MWLP to address protection for its assets, which has been incorporated into the P'Draft MWLP. Otherwise, neither company identified any other matters that were felt to benefit from a policy framework.

3.3.41 Consequently, policy W4 has been updated to include an expectation that wastewater treatment will achieve reductions in phosphate releases and to encourage phosphate recovery for beneficial uses. The supporting text has been updated to reflect the location specific intentions for wastewater infrastructure operated by Dwr Cymru/Welsh Water.

3.4 Mineral working and solid waste projects

Mineral working

3.4.1 As a commercial activity that does not incorporate overnight accommodation, mineral working projects would not normally be considered as a source of phosphate.

3.4.2 However, it is recognised 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.

3.4.3 Mineral working in Herefordshire does not include the mining of phosphate rock, the working of which can release phosphate emissions into the environment. The act of releasing the minerals found in Herefordshire should not release phosphates.

3.4.4 There is potential for phosphate release at both the start and end of mineral working. As soils are stripped, phosphate could be released. Restoration proposals involving schemes that would draw in a lot of visitors to the area could also result in phosphate releases. Restoration to agriculture could also result in phosphate releases, if too much of the nutrient is added to the land.

3.4.5 These risks can be avoided by the use of conditions requiring development proposals to demonstrate how nutrient neutrality, or betterment, would be achieved. For example, testing soils prior to their stripping and setting out a plan to manage phosphate releases; restricting development proposals within any one area; and restricting restoration proposals that would become tourist attractions. Phosphate releases from agricultural waste are addressed below.

3.4.6 All three sand and gravel quarries, Perton Quarry, and the associated development areas are located within the River Lugg SAC catchment area identified in the River Lugg Position Statement (paragraph 3.1.9). The Key Development Criteria attached to the sand and gravel development areas at all of the allocated sand and gravel and crushed rock sites (including Leinthall Quarry) seek to established phased working and avoid a proliferation of associated infrastructure (including wastewater management facilities). The Key Development Criteria also seeks demonstration of nutrient neutrality or betterment.

3.4.7 The P'Draft MWLP has been updated to incorporate the latest guidance from the evidence base.

Waste development (excluding waste water facilities)

3.4.8 As a commercial activity that does not incorporate overnight accommodation, solid waste projects would not normally be considered as a source of phosphate.

3.4.9 Further, no new sites are proposed that would result in changes to agricultural land or practices.

3.4.10 Wide ranging research by hendeca does not indicate that solid waste management infrastructure is generally regarded as a source of phosphates. However, report titled 'WR 0608, Emissions from Waste Management Facilities'[30] (July 2011) prepared by consultancy Environmental Resources Management Ltd, does indicate that phosphate may be released from some waste management processes.

3.4.11 Annex B of the report WR 0608, Emissions from Waste Management Facilities presents process flow diagrams for three waste types. Phosphate is recognised as a 'main emission' from municipal solid wastes and clinical and hazardous wastes going through thermal processes and disposal to landfill.

3.4.12 The MWLP does not promote the landfill of municipal solid waste, clinical or hazardous wastes within Herefordshire; no suitable locations have been identified.

3.4.13 The MWLP does promote the use of thermal processes to recover energy from residual wastes.

3.4.14 A report titled 'Assessment of particulate emissions from energy-from-waste plant'[31] prepared in 2016 to support the National Atmospheric Emissions Inventory, held by Defra 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.

3.4.15 Traditionally in the UK, fly ash from energy from waste plant has been disposed of at specialised landfill facilities (as a hazardous waste) or used to neutralise acidic wastes. However, there is a recognised benefit in recovering the phosphate from energy recovery facilities for beneficial purposes. Elsevier report titled 'Phosphorus recovery from municipal solid waste incineration fly ash'[32] (2013) identifies a potential 70% recovery rate.

3.4.16 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. However, recognising the importance of this issue within Herefordshire, the P'Draft MWLP has been updated to include encouragement for the recovery of phosphorus from the resultant fly ash, to be put to beneficial purposes.

30 http://sciencesearch.defra.gov.uk/Default.aspx?Menu=Menu&Module=More&Location=None&Completed=0&ProjectID=15234 [30.10.2019@15:29]

31 https://uk-air.defra.gov.uk/assets/documents/reports/cat07/1511261133_AQ0726_PM_EfW_emissions_report_Issue2_with_appendices.pdf [31.10.2019@11:02]

32 https://www.sciencedirect.com/science/article/pii/S0956053X13000743 [31.10.2019@11:09]

Drainage from either minerals or waste development

3.4.17 The FAQ 2020 advises that connecting to the mains drainage system, particularly for foul water management '*is still desirable where this options exists'*. (page 3) However, this same section advises that the '*best way forward at the present time is therefore to demonstrate nutrient neutrality.*' However, it remains important for surface rainwater to be considered, as this has the potential to lead to phosphate pathways being created, for example where soils containing phosphates are exposed to rainwater.

3.4.18 The MWSFRA 2020 provides information on the potential for infiltration drainage and the potential pathways to the River Lugg catchment. This document can be used to address the criteria set out in Herefordshire's suite of related documents (published in March 2020 and which may be updated over time) to provide the measures necessary for each development proposal to demonstrate either nutrient neutrality or betterment.

3.4.19 Current guidance indicates that minerals and waste developments would not normally be considered as a source of phosphate. Standard construction and operation practices, which can be supplemented with additional controls where required, are concluded to be appropriate to manage phosphate levels from minerals and waste development proposals.

3.5 Agricultural waste

3.5.1 Agricultural waste is widely recognised[33] as a key diffuse source of phosphate, through leaching from soil, manure application, and food production and wastage. The River Wye SAC NMP identifies agriculture as a key contributor of phosphates to the river environment, alongside wastewater treatment emissions. It is for this reason that the MWLP includes policy to address agricultural wastes (not least as discussed at section 2.4 of this Report).

3.5.2 In short, the policy should give Herefordshire Council (as the local planning authority) more control over the land use aspects of the sector, which include waste disposal, leading to an improved environmental outcome.

3.5.3 Within the P'Draft MWLP, the supporting text that accompanies policy W3 has been supplemented, including reference to the Dutch Case and to Herefordshire Council's Position Statement (recognising that this might change over the plan period). Both the Dutch Case and River Lugg Position Statement are relevant to all forms of development, including those proposed to manage agricultural waste as addressed by policy W3.

3.5.4 Policy W3 is considered to be an innovative and effective measure, adding to the range of tools available to the relevant regulatory bodies to reduce phosphate releases from agriculture, a significant sector within Herefordshire.

3.5.5 However, it is important to remember that agriculture is also a highly regulated sector outside of the planning system, with farm inspections carried out by a range of organisations including: the Rural Payments Agency; the Animal and Plant Health Agency; Natural England; the Soil Association; the Environment Agency; and the Health and Safety Executive. Nutrient Management Plans are already a part of the toolkit used by farmers to seek compliance with legislation, with new EU policy seeking to make nutrient budget mandatory.

[33] This is a consistent conclusion in the documents researched on this matter.

Updates made in August 2020

3.5.6 The Nutrient Management Board met on 9 July 2020 and considered report titled 'Nutrient Management Plan Technical Advisory Group summary paper on updating the NMP Action Plan June 2020' (the 'NMP Action Plan Update Report').

3.5.7 This NMP Action Plan Update Report (provided at Annex G) makes clear that diffuse run off from a number of agricultural units is the predominant source of phosphates in the River Lugg and its catchments. It also helps to clarify the roles that others are playing in seeking to manage this situation and decrease phosphate levels, particularly: the Environment Agency in monitoring and regulating levels; and FarmHerefordshire, in working with the agricultural sector to reduce run off and phosphate levels in run off.

3.5.8 The NMP Action Plan Update Report is consequently considered as further evidence to confirm that it is the right approach to include a policy on the management of agricultural waste within the MWLP.

3.5.9 The text of the P'Draft MWLP in regard to policy W3 had already been substantially redrafted from that of the Draft MWLP, to correct previous errors and reflect updated evidence. In response to the clear conclusions and advice contained within the NMP Action Plan Update Report, that agriculture is the predominant source of phosphates and that there is a strong regulatory regime and support systems in place, it was considered appropriate to add text to the policy requiring applications to demonstrate nutrient neutrality or betterment.

3.6 Incorporating the recovery of phosphorus in policy

3.6.1 In October 2013, the European Commission published 'Sustainable Phosphorus Use'[34], a report prepared to review existing research, indicate possible policy interventions and highlight research gaps.

3.6.2 One of the matters discussed in Sustainable Phosphorus Use, is the concept of peak phosphorus (see section 2.1.6). The concept of a 'peak resource' was first proposed in 1949, to describe '*the point in time when the production quantity of a resource reaches a peak and then declines, constrained by the energy requirements and economics of extracting lower quality and less accessible reserves. This means that the critical point or peak is reached before 100% of the resource is depleted*.'

3.6.3 Phosphate rock is a non-renewable resource and will peak at some point, although there is some debate as to when this will occur. At Box 3, Sustainable Phosphorus Use identifies one estimated peak between 2030 and 2040, which would fall at the end of the MWLP plan period. Box 3 also reports that this estimate was updated to between 2051 and 2092, with an average of 2070. '*Cordell et al (2011) suggest that, at best, the new estimate of phosphorus reserves 'buys time' for us to make more substantial changes to our phosphorus use*'.

3.6.4 Phosphorus is an essential, but non-renewable mineral, the raw resources of which are likely to become unavailable within the foreseeable future. The recovery of phosphorus is therefore an important activity that should be encouraged.

3.6.5 It is clear from WISER that there is a growing expectation for phosphate to be recovered from wastewater and to be made available for beneficial uses. It is also a topic that is current in the

[34] https://ec.europa.eu/environment/integration/research/newsalert/pdf/IR7_en.pdf [31.10.2019:15:19]

water industry press, as the October 2019 on-line article titled 'Wastewater: Seizing the opportunity' by WWT.[35] '*Traditional wastewater treatment methods call for the removal of phosphorus, resulting in increased use of chemicals like iron salts. But the finite nature of phosphorous, for example, makes a compelling case for resource recovery, instead of removing it and treating it as waste*.'

3.6.6 It is also clear that the wastewater treatment companies operating within Herefordshire are already testing appropriate methods. At its Spernal facility in Warwickshire, Severn Trent Water operates a pilot plant to evaluate energy neutral wastewater treatment and the potential for materials recovery. '*In 2020 the company plans to commission the largest demonstration scale AnMBR system in Europe, capable of treating up to 500m3/d*.' AnMBR (anaerobic membrane bioreactors) are a form of anaerobic digestion. '*The effluent from an AnMBR will be relatively rich in nitrogen and phosphorus, but crucially it is free from solids and hence very suitable for adsorption and ion exchange based nutrient recovery technologies that the company will also evaluate at Spernal*.'[35]

3.6.7 An objective of the MWLP is to deliver a circular economy. Within Herefordshire there is a need to reduce phosphate emissions into the River Wye SAC, which means they will need to be captured prior to their release. Section 3.3 above presents the research and wastewater treatment works improvements being pursued by the two wastewater companies operating in Herefordshire. There will be others undertaking similar actions elsewhere. The MWLP promotes the use of energy recovery for residual wastes, which gives the potential to recover phosphate from the fly ash. Anaerobic digestion processes, that can be used at wastewater treatment facilities and promoted on farm and are promoted in the MWLP, can also provide a source for phosphate recovery.

3.6.8 Drawing all of this together leads to the inclusion of a policy intention to encourage the development of infrastructure to enable the recovery of phosphorus.

3.7 Conclusion

3.7.1 Each of the measures set out in sections 3.3 to 3.6 is considered to utilise the planning system in an appropriate way, seeking to direct appropriate land use.

3.7.2 This should be seen as a positive approach within the MWLP, and one that should contribute to achieving nutrient neutrality or betterment, such that the MWLP itself can be recognised as not likely to result in a significant adverse effect.

[35] https://wwtonline.co.uk/features/wastewater-seizing-the-opportunity- [29.10.2019@12:42]

4. Minerals

4.1 Introduction

4.1.1 This section considers the minerals evidence base and responses to the Draft MWLP to document the thought process for key elements of finalising minerals policy.

4.1.2 It cross refers to the Minerals Need Assessment 2019 (the 'MNA 2019', prepared using 2018 data where available) and assumes the reader has read the Supplementary Sites Report and section 2.7 of this Report.

4.2 Responding to the representations

Forecasting

4.2.1 Representations included some level of concern in regard to the mineral forecasting, principally from the CPRE. Overall, the CPRE and Here for Hereford and Wye Ruin It considered that the demand forecasts and consequent levels of extraction were too high, and failed to ensure the long-term conservation of minerals resource. The approach of comparing the infrastructure set out in the Core Strategy with that previously presented in the Unitary Development Plan was considered to be '*spurious*'. The Core Strategy is considered to be out of date, the housing trajectory forecasts were considered to be 'barely credible' and the Experian forecasts were considered unlikely to represent the central element of the Core Strategy, to grow the county's economy (particularly Hereford) at a faster rate than elsewhere.

4.2.2 The Core Strategy is an adopted development plan and consequently is considered to be an appropriate resource to consider within the range of forecast indicators that are used. The MNA 2019 has updated these again and sought to reflect the most up to date information.

4.2.3 The Experian forecast is also considered to be an appropriate reference. It was developed on the basis of Herefordshire specific data and whilst it is now a couple of years old, recognising the uncertainties that lie ahead as Brexit is implemented, it considered to remain relevant.

4.2.4 Forecasting is not an exact science, and minerals data is not comprehensive. A range of forecasts have been considered.

4.2.5 Staffordshire County Council sought more detail on the assessment of sand and gravel provision stated under Draft MWLP policy M3, including whether the annual level of forecast is intended to increase throughout the plan period. Staffordshire County Council also consider that a 10 years sale average should provide the basis for provision, identifying that as Herefordshire currently relies on a level of imports, '*a level of provision greater than the current 10 years sales average could be justified.*'

4.2.6 The MNA 2019 (and previous MNA) have set out the approach used to forecasting sand and gravel provision throughout the plan period. An annual rate of working is not forecast as this is considered to be too precise a level of detail that can reasonably be calculated on the basis of the available data. In any event, the rate of extraction will primarily be driven by market demand, which is beyond the remit of the MWLP.

Level of need stated in policy

4.2.7 The minerals industry felt that the wording of Draft MWLP policies M3 and M4 should be reworded, to permit greater mineral extraction within Herefordshire over the plan period. The Minerals Products Association also considered that the winning and working of sandstone should be less restrictive, and not focussed on addressed local demand.

4.2.8 The policy wording has not been amended as suggested by representatives of the minerals industry, as the proposed text is considered to provide too much encouragement for minerals working. Instead, the policy has been prepared to provide a balance between providing for Herefordshire's forecast level of demand and an ability to contribute to the MASS, and not promoting excessive mineral working such that reserves are not worked efficiently. The policy has been amended to make clear the ability to review the demand forecast through the annual and five-year reviews.

4.2.9 In addition, the assessment presented within the MNA 2019 has been extended to 2041, to reflect the intended end date of the MWLP. This provides a plan period of more than 15 years and should enable appropriate levels of landbank to still be available at the end of the plan period, and leading into the preparation of any revised minerals local plan.

4.3 MNA 2019

Introduction

4.3.1 The MNA 2019 is a new and complete analysis, using the most up to date information and incorporating 2018 data where it was available. It is a complete and discrete report, separate from the previous MNA; however it does build upon those earlier assessments to inform our understanding of current waste management in Herefordshire and how this might affect future demand.

4.3.2 In addition to using he most recent data, the key change to the MNA 2019 is to extend the forecasts to year 2041, reflecting the end date for the MWLP.

Sand and gravel forecast demand and supply

4.3.3 A number of different scenarios were able to be considered for sand and gravel, resulting in a range of landbank availability at the end of the plan period. The MNA 2019 recognises that the extraction of minerals at Upper Lyde Quarry commenced in September 2019, meaning that there are now two operational sand and gravel quarries. This leaves just Shobdon Quarry with an extant consent to be worked, but which is not currently operational (March 2020).

4.3.4 The MNA 2019 has forecast sand and gravel demand for the plan period as extended to 2041. A summary of this assessment is provided at Table 4.1.

4.3.5 A wide range of future demand for new sand and gravel workings is indicated, from none to nearly 14 million. This is reflective of the extent of uncertainties in minerals data.

4.3.6 It is worth also considering the fluctuations seen in the growth forecasts used. Even within the time taken to prepare just the MNA 2019 the House of Commons forecast waste regularly updated; the forecast annual growth for the West Midlands region used in the Assessment experience a further reduction, to 1.1% annual growth, just the day before the modelling was concluded.

4.3.7 When hendeca completed the first MNA (MNA 2017) the House of Commons forecast was 2.4% annual growth, decreasing to 1.8% in the MNA Update 2018. In November 2019, it was 1.3% and in February 2020 it was 1.1%. This is a significant drop over a relatively short period of time, and is now the lowest of the GVA forecasts, having started out the highest.

Table 4.1 Summary of sand and gravel forecast demand at 2041

Current level of import Scenario (MNA 2019, Table 4.7)	**Demand (tonnes)**	**Permitted reserve (tonnes)**	**Landbank**	**Tonnage required to maintain 7 year landbank**
GVA growth (highest forecast)	288,000	0	0 years	4,944,000
Population growth, demand at 4.6 tonnes of aggregate per head	56,000	1,214,000	21.7 years	0
ONS household projections	65,000	720,000	10.7 years	0
Self sufficient Scenario (MNA 2019, Table 4.8)	**Demand (tonnes)**	**Permitted reserve (tonnes)**	**Landbank**	**Tonnage required to maintain 7 year landbank**
GVA growth (highest forecast)	628,000	0	0 years	13,716,000
Population growth, demand at 4.6 tonnes of aggregate per head	123,000	0	0 years	1,118,000
ONS household projections	142,000	0	0 years	2,366,000

4.3.8 In order to deliver the positive approach sought in the Vision and Objectives of the MWLP, to be self-sufficient and to make a reasonable contribution to the MASS, it is appropriate to consider planning for the greatest forecast demand, recognising that this may be an over-estimate. However, the nearly 14 million tonnes of sand and gravel forecast using GVA growth and assuming self-sufficiency, is so much higher than the others, that it appears to be an outlier.

4.3.9 Sand and gravel reserves at: Upper Lyde (Sites M03); Shobdon (Site M04); and Wellington (Sites M05) are all proposed to be allocated in the MWLP. Using information provided in the Call for Sites submissions these allocations would provide a minimum of nearly 3 million tonnes of sand and gravel resource: 700,000 tonnes at Sites M03b, c and d; 1.25 million tonnes at Site M05c; and 1.0 million tonnes at Site M05d.

4.3.10 The reserves available at the Shobdon Quarry extension and three of the areas at Wellington (Sites M05b, e and g) are unknown, but would be additional. That the working area at Site M05g is intended to be reduced does not affect the current understanding of mineral reserve available at the allocated sites.

4.3.11 In addition, there are two preferred areas identified within the MWLP. New operations in these preferred areas would add to the robustness of sand and gravel supply within Herefordshire and make a reasonable contribution to the MASS, should the higher demands become evident through the lifetime of the MWLP. They also provide some focus to the areas that could be considered toward the end of the plan period, when annual monitoring and the five-year reviews will be able to inform Herefordshire Council whether additional reserve would be required.

4.3.12 Consequently, the approach to site allocation and preferred areas of search are demonstrated to be sufficient to meet the wide range of demand forecast for sand and gravel through the plan period, to 2041. All of the forecasts can be expected to be met, with the exception of the GVA growth and self-sufficiency. Policy of the MWLP should refer to provision of 5 million tonnes over the plan period.

4.3.13 However, it would not be a preferred strategy for many quarries to be opened to meet the highest forecast demand, without there being a robust market for it. Policy of the MWLP seeks to phase development such that sand and gravel reserves and sales can be monitored throughout the lifetime of the MWLP, allowing new operations only as required. This policy approach would avoid a proliferation of workings and should encourage optimal working at each operational quarry.

Crushed rock forecast demand and supply

4.3.14 Two methods have been considered for forecasting the potential future demand for crushed rock. These have produced widely varying forecasts of demand for 2019-2041, ranging from just under 3 million tonnes to nearly 17.5 million tonnes, as set out in Table 5.2. Again, this is reflective of the extent of uncertainties in minerals data.

4.3.15 Table 4.2 shows that demand for crushed rock could exceed even the 11.54 million tonnes of permitted reserves data for 2013, the most recent year for which figures were available for Herefordshire separately from other counties (MNA 2019, Table 3.5).

Table 4.2 Summary of crushed rock forecast demand at 2041

Scenario (MNA 2019, Table 4.9)	**Demand 2019 2041**	
	Assuming imports at current level	Assuming self sufficiency
Population growth, demand at 4.6 tonnes of aggregate per head	2,999,000	12,495,000
ONS household projections	4,173,000	17,386,000

4.3.17 It is not possible to report annual sales for crushed rock specific to Herefordshire. The MNA 2019 identifies current reserves of just under 6 million tonnes. Reference to the arbitrary assumed million tonnes per year and 950,000 tonnes per year average sales across the

combined authorities, would indicate a landbank of 6 to 6.3 years (MNA 2019, section 3.3 and Table 3.5).

4.3.18 Crushed rock reserves at Leinthall (Sites M07) and Perton (Sites M10) quarries are both proposed to be allocated in the MWLP. Within the submissions made in response to the Call for Sites 2016, the reserve across Site M07b is around 7 million tonnes. Information was not provided by the operator for the amount of reserve at Site M10b. However, reference to the appeal decision (footnote 9, reference APP/W1850/W/15/3133972) indicates reserve of '*2 million tonnes, with some 0.75 million tonnes comprising Aymestry Limestone.*' There would appear to be some 9 million tonnes of limestone resource available within the proposed allocation sites.

4.3.19 In addition, there are two preferred areas of search identified within the MWLP. New operations in these areas of search would add to the robustness of sand and gravel supply within Herefordshire and make a reasonable contribution to the MASS, should the higher demands become evident through the lifetime of the MWLP. They also provide some additional areas to consider toward the end of the plan period, when annual monitoring will be able to inform Herefordshire Council whether additional reserve would be required.

4.3.20 It is not possible to be definitive about whether these proposed allocations will be sufficient throughout the plan period. If demand for crushed rock from Herefordshire is at the lower end of the forecasts, then it would appear to be so; there is potential that a forecast demand of nearly 17.5 million tonnes is excessive. Discussions with the operators during the site visits (2017) indicated that the crushed rock within Herefordshire is not of a particularly high quality, for example it cannot be used for road surfacing, although it is used in a range of other construction projects.

4.3.21 Policy of the MWLP should refer to provision of 9 million tonnes over the plan period. This should provide adequate resource, without placing undue stress on the environment of Herefordshire and can be monitored throughout the plan period.

4.3.22 The approach to site allocation and areas of search are demonstrated to be generally sufficient to meet the wide range of demand forecast for crushed rock through the plan period, to 2041. However, if the higher demand for crushed rock does arise over the plan period, there is potential that Herefordshire would not be able to make a material contribution to the MASS, for crushed rock.

4.3.23 As with sand and gravel, it would not be a preferred strategy for many quarries to be opened to meet the highest forecast demand, without there being a robust market for it. Policy of the MWLP seeks to phase development such that crushed rock reserves and sales can be monitored throughout the lifetime of the MWLP, allowing new operations only as required.

4.3.24 This policy approach would avoid a proliferation of workings and should encourage optimal working at each operational quarry.

Building stone

4.3.25 Whilst data is not available more recently than year 2014, the information that is available indicates a small and stable market for the sale of building stone from Herefordshire.

4.3.26 All the active sandstone delves appeared suitable in principle to be able to gain an extension of time for mineral working. This applies to sites: M12 Callow Delve; M13 Black Hill Delve;

M16 Llandraw Delve; M17 Pennsylvani Delves; M18 Sunnybank Delve; and M20 Westonhill Wood Delves.

4.3.27 Furthermore, three of the sites: M13 Black Hill Delve; M16 Llandraw Delve; and M20 Westonhill Wood Delves appear appropriate for future extension in size of the working area.

4.3.28 These sites have been allocated in the MWLP accordingly. Sandstone demand is forecast to continue at the level that has been seen historically. It is limited and the proposed sites are considered appropriate to satisfy the forecast demand. In addition, the policy allows other workings where relevant criteria are met.

Clay, Coal and Unconventional Hydrocarbons

4.3.29 It is reasonably assumed that there will be no demand for these minerals and consequently no site is proposed to be allocated in the MWLP.

4.3.30 The revised position in relation to Draft MWLP policy M7 is set out at section 2.3 of this Report.

5. Waste

5.1 Introduction

5.1.1 This section considers the minerals evidence base and responses to the Draft MWLP to document the thought process for key elements of finalising minerals policy.

5.1.2 It cross refers to the Waste Need Assessment 2019 (the 'WNA 2019', prepared using 2018 data where available) and assumes the reader has read the Supplementary Sites Report and section 2.7 of this Report.

5.2 Responding to the representations

5.2.1 There were no representations made in direct response to the WNA Update 2018 or to the level of need stated in the Draft MWLP policy.

5.2.2 However, representations have been made seeking:

- extending the principles of the resource audit to refurbishment schemes and not just new build development;
- the inclusion of composting schemes; and
- greater integration of the circular economy.

5.2.3 All of these points have been accepted and the relevant text has been amended within the Publication Draft MWLP.

5.3 WNA 2019

Introduction

5.3.1 The WNA 2019 is a new and complete analysis, using the most up to date information and incorporating 2018 data where it was available. It is a complete and discrete report, separate from the previous WNA; however it does build upon those earlier assessments to inform our understanding of current waste management in Herefordshire and how this might affect future demand.

5.3.2 In addition to using the most recent data, the key change to the WNA 2019 is to extend the forecasts to year 2041, reflecting the end date for the MWLP.

Forecast waste arisings

5.3.3 Incorporating relevant fresh evidence, the WNA 2019 has calculated total waste arisings of between 1,156,500 to 1,248,500 tonnes in Herefordshire at 2041. Table 5.1 presents the outcome of the analysis, which is based on based on 2018 data, which includes analysis using the revised Defra estimates for CD&E and agricultural wastes.

Table 5.1 Summary of waste forecasts, Herefordshire, based on 2018 data
(WNA 2019, Table 5.14)

Waste Stream		Tonnes (rounded to nearest 1,000 tonnes)						
		Baseline	Forecast					
		2018	2020	2025	2030	2035	2041	
Local authority collected waste		87,000	88,000 to 99,300	90,500 to 106,600	93,000 to 114,200	95,500 to 122,000	98,500 to 131,500	1
Commercial and industrial waste		157,000 to 201,000	163,000 to 204,000	181,000 to 210,000	198,000 to 217,000	216,000 to 224,000	233,000 to 240,000	2
CD&E	Total	393,000 to 412,000	403,000 to 422,000	444,000 to 464,000	477,000 to 500,000	507,000 to 531,000	546,000 to 573,000	3
	Non-hazardous C&D	191,000 to 204,000	196,000 to 209,000	216,000 to 230,000	232,000 to 248,000	246,000 to 263,000	265,000 to 284,000	4
Agricultural waste (non-natural)		5,700 to 7,400	6,000 to 8,000					5
Hazardous waste (subset of other waste streams)		12,000	8,000 to 12,000					6

Forecast demand for new capacity

5.3.4 The WNA 2019 makes clear the difficulties across the analysis. Various assumptions have had to be used in forecasting future waste arisings, understanding the tonnages that might be expected to go through each management method, the resultant capacity requirement and critically for the MWLP: what this means for the level of need of new, additional waste management infrastructure required within Herefordshire.

5.3.5 Table 5.2 summarises the outcomes for each waste stream calculated in the WNA 2019 to consider what this future level of waste management infrastructure need may be. It takes the highest potential outcome across all the waste streams, including to report hazardous wastes separately whilst they are considered as a subset of the other waste streams in the WNA 2019.

5.3.6 In this way, an understanding of future waste management infrastructure is considered in the broadest sense, and the greatest level of flexibility can be built into the MWLP.

Table 5.2 Summary of additional future waste management infrastructure requirements (tonnes)

Waste	Management route	YEAR				Maximum	row
		2025	2030	2035	2041		
LACW	Biological	None	10,000[1]			**10,000**	1
	Recycling	None	22,500 to 30,000[2]			**30,000**	2
	Residual Treatment	No additional capacity requirement identified[3]					3
C&I	Biological	50,000[4]				**50,000**	4
	Recycling						5
	Residual Treatment	63,000 to 94,500[5]	61,200 to 86,800[5]	58,400 to 78,400[5]	64,700 to 81,500[5]	**87,000**	6
Non-natural Agricultural	Residual Treatment	6,000 to 8,000[6]				**8,000**	7
Hazardous	Residual Treatment	8,000 to 12,000[7]				**12,000**	8
CD&E	Recovery (90% recovery)	194,400 to 207,000[8]	208,800 to 223,200[8]	221,400 to 236,700[8]	238,500 to 255,600[8]	**255,600**	9
	Disposal (90% recovery)	21,600 to 23,000[9]	23,200 to 24,800[9]	24,600 to 26,300[9]	26,500 to 28,400[9]	**28,400 each year**	10
	Disposal (70% recovery)	64,800 to 69,000[10]	69,600 to 74,400[10]	73,800 to 78,900[10]	79,500 to 85,200[10]	**82,500 each year**	11

Notes:

1. WNA 2019, paragraph 6.2.15, first bullet concludes no new capacity need be delivered. A round number of 10,000 tonnes has been presented to provide for flexibility.
2. WNA 2019, paragraph 6.2.15, second bullet concludes no new capacity need be delivered. The additional tonnage has been presented to provide for flexibility.
3. WNA 2019, paragraph 6.2.15, third bullet.
4. WNA 2019, paragraph 6.3.12 concludes no new capacity need be delivered. A need tonnage of 50,000 is presented (the mean of the calculated additional capacity required to achieve recycling targets, WNA 2019, paragraphs 6.3.9 and 6.3.10) to provide for flexibility.
5. WNA 2019, Table 6.3 (rows 13 to 15) and paragraphs 6.3.13 and 6.3.14)
6. WNA 2019, paragraph 6.5.3
7. WNA 2019, paragraph 6.6.1
8. WNA 2019, Table 6.6 (rows 7 and 8). This is total capacity requirement and does not account for consented capacity that is already operating.
9. WNA 2019, Table 6.5 (rows 11 and 12)
10. WNA 2019, Table 6.5 (rows 9 and 10)

5.3.8 Taking this approach Table 5.2 indicates that by 2041 there is could be the following, maximum, need for new waste management infrastructure in Herefordshire:

- LACW: 40,000 tonnes of recycling/biological treatment capacity;
- C&I, including non-natural agricultural waste: 50,000 tonnes of recycling/biological treatment capacity and 95,000 tonnes of residual treatment capacity;
- Hazardous waste: 12,000 tonnes of residual treatment capacity; and

- CD&E waste: 255,600 tonnes of recovery capacity and up to 82,500 tonnes annually of disposal capacity.

5.4 Site Provision

LACW, C&I waste, non-natural agricultural and hazardous wastes

5.4.1 As explained in the Preparing the Draft Plan Report 2018 (from paragraph 5.3.8) there is no linear correlation between the capacity of a waste management facility and the land area required; doubling the capacity of a plant does not necessarily double the required area of land. For all development, there is a balance to be made between the area of land available and the area of land desired. Additional space will enable more free movement around a site, but expanding a site too widely may result in unacceptable impacts.

5.4.2 In total, a combined, maximum, forecast capacity demand would be 197,000 tonnes; a demand of some 70,000 tonnes more than the mid-point calculation used in preparing the Draft MWLP (see Preparing the Draft Plan Report 2018, section 5.3).

5.4.3 Again using 'Planning for Waste Management Facilities – A Research Study'[36] as a guide would indicate that waste management facilities may generically be considered deliverable at the following capacity to site size proportions:

- Biological treatment: operating at 5,000 to 40,000 tonnes, site requirement of 0.15 to 0.6 hectares ('ha');
- Recycling/mixed waste processing: operating at 50,000 tonnes per annum, site requirement of 1 to 2ha;
- Small scale thermal treatment, including pyrolysis and gasification: generally operating at 50,000 tonnes per annum, site requirement of 1 to 2ha;
- Large scale thermal treatment: operating at 250,000 tonnes per annum, site requirement of 2 to 5ha.

5.4.4 In simple terms, in order to deliver the forecast 197,000 tonnes of new capacity would require either:

- one site of 2 to 5ha in size; or
- four sites of 0.5 to 2ha.

5.4.5 The forecast need for new infrastructure incorporates a number of different wastes and treatment types, it is considered unlikely that this would all be accommodated on one site. It is more likely that a greater number of sites at a range of sizes would be sought.

5.4.6 Four sites are presented to be allocated within the MWLP for the treatment of solid wastes, presenting a range of sizes and delivery availability. Three of the sites are currently in use as LACW treatment facilities, but may become available through the plan period or be reconfigured to treat more LACW or to provide alternative treatment facilities. The former City Spares metals recovery site (Site W19) is currently vacant, and believed to be available immediately. It is not a large site (just over 1 hectare) but it is located within the southern

[36] Published by Office for the Deputy Prime Minister, now the Ministry of Housing, Communities and Local Government, in August 2004. The document appears no longer to be available on the GOV.UK website. The document is introduced in the Preparing the Draft Plan Report 2018 at paragraph 5.3.9.

extension area of Hereford (Core Strategy, policy HD6) and could integrate well with the existing and forthcoming development.

5.4.7 In addition, the Supplementary Sites Report also confirms that the strategic employment areas would be appropriate for waste related development. The Preparing the Draft Plan Report 2018 confirms that this is an appropriate approach to follow.

5.4.8 It is concluded that the combination of sites and locations allocated in the MWLP will deliver new infrastructure necessary to satisfy the maximum capacity demand forecast for LACW, C&I, non-natural agricultural and hazardous wastes. The additional benefit of identifying the strategic employment areas and industrial estates is that opportunities are provided for greater sharing of resources, enabling a circular economy to thrive.

Construction and demolition wastes, treatment and disposal

5.4.9 Assuming a 90% recovery target for non-hazardous CD&E waste results in a treatment capacity demand of 223,000 tonnes by 2030, increasing to nearly 256,000 tonnes by 2041.

5.4.10 Table 3.4 of the WNA 2019 identifies that the facility operating at Former Lugg Bridge Quarry already benefits from an annual permitted (Environmental Permit) capacity of 250,000 tonnes, and that in 2018 it received just over 100,000 tonnes. This indicates that there is another 150,000 tonnes of capacity available at the site. The Wye Valley Group operates the CD&E recovery facility located at Former Lugg Bridge Quarry and has plans to increase capacity up to 250,000 tonnes per annum (see Preparing the Draft Plan Report 2018, paragraphs 5.3.22 to 5.3.26 and paragraphs 6.3.22 to 6.3.27).

5.4.11 Recognising that the CD&E data is particularly difficult to rely upon and is considered likely to be an over estimate of future demand, this facility would be sufficient (operating at full EP capacity) to manage the calculated infrastructure demand for CD&E wastes forecast in Herefordshire. It is proposed to allocate this site in the MWLP, to enable increased capacity to be delivered.

5.4.12 In addition, there are other CD&E treatment facilities operating across Herefordshire (at industrial estates) in addition to the capacity provided at sites that are exempt from environmental permitting. This demonstrates that the industry is comfortable in these locations. Finally, CD&E recovery can be appropriate development at quarries, where much of the same infrastructure as is used for mineral processing can be used.

5.4.13 It is concluded that the combination of sites and locations allocated in the MWLP will deliver new infrastructure necessary to satisfy the maximum capacity demand forecast for the recovery of CD&E wastes.

5.4.14 The WNA 2019 calculates a wide range in the forecast demand for the disposal of non-hazardous CD&E waste: from c.30,000 to 82,500 tonnes each year, depending on the level of recovery achieved. Disposal capacity has to be considered as a cumulative total, leading to a demand (at 2041) ranging from 660,000 to 1.8 million tonnes.

5.4.15 Three sand and gravel sites are considered appropriate for the deposit of inert wastes disposal to achieve the recovery of land following mineral extraction: Sites W43 Upper Lyde; Site W44 Shobdon; and Sites W45 Wellington. The Call for Sites information identifies that these sites would provide a minimum of 3 million tonnes of sand and gravel, releasing a void that could then be backfilled with non-hazardous wastes. It is recognised that not all of the land within these sites would necessarily be appropriate for disposal, particularly those areas

that fall within the flood plain. However, the 3 million tonnes of reserve is only estimated across some of the allocated sites, not all; it is a minimum forecast of available mineral.

5.4.16 If it is assumed that these sites would provide the opportunity for 1.5 million tonnes (i.e. halving the estimated mineral resource) this would be far in excess (more than double) of the disposal capacity required should 90% CD&E waste recovery be achieved. It would almost deliver all of the disposal capacity required should a level of 70% recovery only be achieved.

5.4.17 Paragraph 6.4.1 of the WNA 2019 identifies that in the UK the 70% recovery target for CD&E waste has been consistently achieved, with a recovery rate of over 90% for each year between 2010 and 2014. Consequently, it is reasonable to assume that the 90% recovery target will be achieved within Herefordshire, leading to a lower demand for disposal capacity.

5.4.18 It is concluded that the combination of sites allocated in the MWLP will deliver new infrastructure necessary to satisfy the maximum capacity demand forecast for the disposal of CD&E wastes.

5.4.19 Policy W6 of the Draft MWLP has been amended to clarify the order of preference for the location of new CD&E management facilities.

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