Worcestershire Minerals and Waste Development Framework: Authority Monitoring Report

January 2016 to December 2016

and

January 2017 to December 2017

Executive Summary

Under the Town and Country Planning (Local Planning) (England) Regulations 2012 (as amended), the County Council is required to produce an Authority Monitoring Report (AMR) of the Minerals and Waste Local Development Framework, which during the monitoring year consisted of saved policies from the County of Hereford and Worcester Minerals Local Plan (1997), and the Worcestershire Waste Core Strategy (2012). The purpose of the AMR is to review the progress against the County's Mineral and Waste Local Development Scheme (LDS) and to assess the extent to which the objectives of the Minerals and Waste Local Development Framework are being achieved through the implementation of the polices contained within the Waste Core Strategy.

The waste indicators monitored in this AMR reflect the objectives of the Waste Core Strategy, which was adopted on 15th November 2012. Due to the lack of objectives in the 1997 Minerals Local Plan, the minerals indicators currently being monitored reflect a combination of issues identified in the National Planning Policy Framework, data from the Local Aggregates Assessment, and mirror some of the issues in the Waste Core Strategy's objectives.

The monitoring period for this Authority Monitoring Report (AMR) is 1st January 2016 to 31st December 2016, and 1st January 2017 to 31st December 2017.

Local Development Scheme (LDS)

The LDS adopted in 2015 was in place during the 2016 and first part of the 2017 monitoring periods. It set out the programme for the production of a new Minerals Local Plan. However, performance against the 2015 LDS was off target during 2016 and 2017, with the Third Stage Consultation taking place slightly behind schedule. An updated Local Development Scheme was adopted in July 2017 to reflect the need to undertake an additional call for sites and a further additional stage of consultation on the Minerals Local Plan, and it also set out the timetable for commencing of a review of the adopted Waste Core Strategy.

Significant progress was made during the monitoring period towards drafting the Minerals Local Plan in accordance with the 2017 LDS for the Fourth Stage Consultation scheduled for late-2018, and the fourth call for sites also took place from September 2017 to January 2018. Performance against this revised LDS was on track for the remainder of the 2017 monitoring period.

Performance against the adopted LDS was on target, with the LDS revised in 2017.

Waste Core Strategy

The adopted Waste Core Strategy includes 8 plan objectives and a set of indicators, targets and milestones to monitor the achievement of these objectives. Performance against the majority of waste indicators was good, with targets for 22 of the 39 indicators being met, meaning that 6 out of the 8 objectives were being delivered.

Table 1. Performance of WCS objectives.

Objective	Performance
WO1: To base decisions on the need to reduce greenhouse gas emissions and to be resilient to climate change.	This objective is largely being delivered.

Objective	Performance
WO2: To base decisions on the principles of sustainable development by protecting and enhancing the County's natural resources, environmental, cultural and economic assets, the character and amenity of the local area and the health and wellbeing of the local people.	This objective is largely being delivered.
WO3: To make driving waste up the waste hierarchy the basis for waste management in Worcestershire.	The performance of this objective cannot be assessed due to incomplete data.
WO4: To ensure that the waste implications of all new development in Worcestershire are taken into account.	This objective is largely being delivered.
WO5: To enable equivalent self-sufficiency in Waste Management in the County by addressing the "Capacity Gap" over the life of the strategy to 2027 and safeguard existing waste management facilities from incompatible development.	This objective is largely being delivered.
WO6: To involve all those affected as openly and effectively as possible.	There are significant failings in delivering this objective.
WO7: To develop a waste management industry that contributes positively to the local economy.	This objective is largely being delivered.
WO8: To direct development to the most appropriate locations in accordance with the spatial strategy.	This objective is largely being delivered.

Relating to objective WO6, in the case of the requirement for planning applications for waste management to include a consultation statement, none of the planning applications permitted during the monitoring period contained this statement, against a target of 100%.

Furthermore, another of the areas where targets are not being met is delivery of waste management facilities in accordance with the Waste Core Strategy's Geographic Hierarchy. Only 50% (one application) of the new permitted waste development for new re-use, recycling, storage, sorting and transfer capacity was located in the highest (most appropriate) levels of the geographic hierarchy in the 2016 monitoring period, against a target of 100%. Due to the specifics of the application determined in 2016 it has been established that in this case the location was acceptable. No new re-use, recycling, storage, sorting and transfer capacity was permitted in 2017, leading to this indicator being unable to be assessed in 2017. However, there is a long-term trend of poor performance against the geographic hierarchy which will continue to be monitored.

Strong performance is being seen in indicators measuring the delivery of Objective WO2 for sustainable waste management development which contributes to for the protection and enhancement of the county's natural resources.

Although some progress is being seen in driving waste up the waste hierarchy (Objective WO3), no overall conclusion can be drawn on its performance due to the lack of reliable data which prevents effective monitoring of re-use, recycling and recovery of construction and demolition waste, as well as Household, Commercial and Industrial waste. However, the proportion of Local Authority Collected Waste (LACW) managed in Worcestershire being disposed of in landfill has fallen to 15% in 2017 (49% in 2016) since the construction of the Energy from Waste Plant at Hartlebury. Re-use, recycling and other recovery rates of hazardous waste are already exceeding the2020 target.

Good progress has also been seen towards achieving equivalent self-sufficiency[1] in the waste management capacity which exists in the county for managing all waste streams through re-use, recycling and other recovery, and landfill capacity remains adequate for the life of the Waste Core Strategy.

Minerals Local Plan

The adopted County of Hereford and Worcester Minerals Local Plan does not contain monitoring indicators. There is however a role for the AMR to monitor the supply of minerals and the decision making process and it is the Council's intention to continue to monitor minerals indicators set out in previous AMRs, which reflect issues identified in national policy, the Local Aggregates Assessment and mirror issues from the Waste Core Strategy indicators, until the new Minerals Local Plan is sufficiently developed.

The indicators are being monitored in advance of the adoption of the emerging Minerals Local Plan, which will contain new specific indicators to monitor its performance, however no assessment of performance is being conducted at this time.

Statement of Community Involvement (SCI)

The SCI was updated in February 2015.

Satisfaction with the Development Plan process was asked as part of the Third Stage Consultation on the Minerals Local Plan between Autumn 2016 and Spring 2017. This established an 86% satisfaction rate based upon a limited sample size (8 consultees responded to this question).

Satisfaction levels with the planning application process/service were also considered satisfactory, with no complaints being wholly upheld by the ombudsman, court decisions against the council or, appeals upheld.

Conclusion

Overall 6 waste objectives showed good performance, with no issues identified which have long term implications for the objectives and vision of the adopted Waste Core Strategy to be delivered. Progress on the development of a new Minerals Local Plan was continuing in accordance with the LDS. Work arising from this monitoring report will continue into 2018 to address the identified issues and to rectify data issues in partnership with the data owners.

[1] See page 39 for definition

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Review of the Waste Core Strategy

Background to the review

Under Regulation 10A of the Town and Country Planning (Local Planning) (England) Regulations 2012 (as amended), the County Council is required to review local plans once every 5 years from the date of adoption. The National Planning Policy Framework (paragraphs 31-33) and Planning Practice Guidance on plan-making (Paragraph: 062 Reference ID: 61-062-20190315, Revision date: 15 03 2019) clarify that such reviews should assess whether the plan needs updating at least once every five years, taking into account changing circumstances affecting the area or any relevant changes in national policy, and that reviews should be proportionate to the issues in hand. Plans should then be updated as necessary.

The Waste Core Strategy for Worcestershire was adopted in November 2012. Therefore, a review of the performance of the plan is due.

The adopted Waste Core Strategy includes 8 plan objectives and a set of indicators, targets and milestones to monitor the achievement of these objectives. Performance against these indicators has been monitored in Annual/Authority Monitoring Reports since the plan was adopted in 2012. The performance during 2016 and 2017 is set out in detail in chapter 4 of this AMR. The monitoring indicators and conclusions drawn in the AMR as to whether objectives are being achieved is considered to provide a robust framework to assess whether parts of, or all of, the Waste Core Strategy need to be updated. Trends in performance in previous years are also considered where relevant.

Performance in delivering the Waste Core Strategy's objectives

Performance against the majority of waste indicators was good, with targets for 22 of the 39 indicators being met, meaning that 6 out of the 8 objectives were being delivered in 2017. This matches the findings of previous AMRs, indicating the Waste Core Strategy is performing both adequately and consistently in most respects.

Due to data limitations one objective of the Waste Core Strategy (**Objective WO3: To make driving waste up the waste hierarchy the basis for waste management in Worcestershire**) has been unable to be assessed in recent years; however the performance of indicators within this objective shows generally good performance where able to be assessed. It is therefore considered that no action is required in relation to this objective.

However, the performance of **Objective WO6: To involve all those affected as openly and effectively as possible** is showing significant failings. This is primarily due to the absence of consultation statements submitted by the applicants. This has been highlighted in previous AMRs, with action taken in the form of the adoption of the Validation Document alongside the Waste Core Strategy and officer training as mechanisms intended to support the delivery of this objective. **Therefore, it is not considered this is a failure of the Waste Core Strategy which requires modifications to policies to rectify.**

Another area of the plan that has consistently shown poor performance is the geographic hierarchy (Indicators W29 and W30 within **Objective WO8: To direct development to the most appropriate locations in accordance with the spatial strategy**). The targets set for monitoring these indicators focus on directing development to the highest levels of geographic hierarchy (i.e. levels 1 and 2). However, policy WCS 3 also includes a mechanism to enable re-use and recycling facilities in all levels of the geographic hierarchy where demonstrated that the proposed location

is at the highest appropriate level of the geographic hierarchy, and policy WCS 4 includes caveats to allow 'other recovery' facilities in levels 3, 4 and 5 of the geographic hierarchy where the proposed development cannot reasonably be located in levels 1 or 2, and where demonstrated that the proposed location is at the highest appropriate level of the geographic hierarchy. These caveats relating to allowing developments at the highest appropriate level of the geographic are not captured in the monitoring indicator. Therefore, despite the performance of the monitoring indicators suggesting poor performance throughout past AMRs, developments are being permitted in the highest appropriate level as dictated in policy WCS 3 and WCS 4, in accordance with the spatial strategy. Therefore, this issue is not preventing appropriate development from coming forward.

In addition, due to the way the boundaries of the zones in the geographic hierarchy were drawn, it has proven to be difficult in some circumstances to determine which zone a development is located within. In these circumstances, the caveat of "highest appropriate level" is often relied upon in order to demonstrate that the general location is appropriate, irrespective of which side of the zone boundary the development is proposed to be in.

As this is not considered to be a failure of the WCS's spatial strategy or policies, it therefore does not require revisions to the WCS. However, this monitoring discrepancy will be taken into account in the interpretation of these indicators in future AMRs and will be taken into account in future reviews or revisions of the Waste Core Strategy.

Changes in circumstances or national policy

The Waste Core Strategy was adopted in 2012. At the time of adoption, the WCS was in full conformity with the NPPF, also published in 2012. As of 2016 and 2017, no changes have been made to national policy which would affect the conformity of the WCS with national policy. In addition, no other circumstances have changed relating to the plan area which would render the plan out of date.

However, the NPPF was updated in 2018, and again in 2019. The impact of any changes relating to aspects covered by the WCS will be assessed in each subsequent AMR.

The National Planning Policy for Waste was updated in October 2014, however none of these updates conflicted with policies or objectives within the Waste Core Strategy. Therefore, the WCS remains in accordance with national policy.

Conclusion of the review and next steps

Overall, performance of the Waste Core Strategy is generally good, with no urgent policy revisions required at this time. However, it is recognised that some of the baseline data which was used in developing the WCS is now becoming dated.

In July 2018 a new Minerals and Waste Local Development Scheme (LDS) was adopted, setting out that preparatory work for revision of the Waste Core Strategy will begin in Quarter 2 of 2021. It is considered that in light of the generally good performance of the Waste Core Strategy, this remains an appropriate timescale to commence work on reviewing the Waste Core Strategy more fully. Future iterations of the Local Development Scheme will set out a more detailed timetable for this review.

Under the Duty to Cooperate, Worcestershire County Council commenced discussion with the West Midlands Resource Technical Advisory Body (RTAB) about the data which is available and the methods which would be most appropriate for use in understanding and forecasting waste arisings and waste management capacity requirements. These discussions led to the development of "Good Practice Guidance for Preparing a Waste Evidence Base for Local Plans

in the West Midlands Area" which was adopted by the West Midlands RTAB in December 2019. This good practice guidance will be used to inform the evidence base for more detailed review and potential revision of the Waste Core Strategy.

Introduction

Purpose of the AMR

1.1.1. This Authority Monitoring Report (AMR) covers the period from 1st January 2016 to 31st December 2017.

1.1.2. Under the Town and Country Planning (Local Planning) (England) Regulations 2012 (as amended), the County Council is required to produce an AMR of the Minerals and Waste Local Development Framework. The AMR assesses the Minerals and Waste policy framework, which during the monitoring year consisted of saved policies from the County of Hereford and Worcester Minerals Local Plan 1994-2004, and the Worcestershire Waste Core Strategy 2012-2027. The purpose of the AMR is to:

- Review the progress of implementing the County's Mineral and Waste Local Development Scheme (LDS), particularly whether the Council is meeting the timescales and milestones set out in the Scheme;
- Assess the performance of the policies of the adopted Waste Core Strategy (WCS) in delivering its objective based on the indicators and targets set out in the WCS;
- Monitor strategic issues in relation to minerals development and provide baseline data for the emerging Minerals Local Plan. Once adopted the Minerals Local Plan will include monitoring indicators which will be reported on in the AMR;
- Assess whether the policies in the Development Plan Documents prepared by the County Council as Minerals and Waste Planning Authority need to be adjusted or replaced;
- Assess whether the policies prepared by the City, Borough and District Councils as Local Planning Authorities accord with the Minerals and Waste Development Framework; and
- Monitor consultation activities and the indicators set out in the Statement of Community Involvement.

1.1.3. The AMR is published alongside an annual update on the Local Aggregates Assessment (LAA) in Annex 1: LAA. The LAA contained within Annex 1 uses 2017 data. An LAA using 2016 data was previously published and is available at www.worcestershire.gov.uk/amr.

1.1.4. The Development Plan Documents prepared by the Borough, City and District Councils in Worcestershire are assessed in the AMRs prepared by those authorities.

1.1.5. The AMR for this and previous years is published on the Council's website: www.worcestershire.gov.uk/amr.

Format and Content

1.1.6. The format and content of this AMR differs from previous years. This AMR will cover both the 2016 monitoring period, and the 2017 monitoring period. As the most recent data set, the results for 2017 are used to assess the performance of the Waste Core Strategy and Minerals Local Plan in the county, with the 2016 data being reported without any decisions made regarding overall plan performance. Should an indicator have failed in the 2016 monitoring period but met its target in 2017, the earlier failure is likely to have been caused by short term factors which do not require any action. However, consideration has been

given to any failures to ensure this is the case, and that they do not indicate a fundamental problem with any of the policies or objectives.

Implementation of the Council's Minerals and Waste Local Development Scheme

Indicator analysis

2.1. Worcestershire County Council is the Local Planning Authority for minerals and waste planning for the county of Worcestershire. Section 15 of the Planning and Compulsory Purchase Act 2004, as amended, sets out the requirement for Local Planning Authorities to prepare and maintain a scheme and schedule of planning policy documents that it intends to produce, known as a Local Development Scheme. The Minerals and Waste Local Development Scheme (LDS) has two main purposes:

- To inform the public about the preparation and adoption of planning documents; and
- To establish and reflect Council priorities and enable work programmes to be set for the preparation of the documents.

2.2. The LDS adopted in 2015 was in place during the 2016 monitoring period, and the first half of the 2017 monitoring period. It set out the programme for the production of a new Minerals Local Plan. It updated the 2012 LDS to take account of changes to the timetable resulting from the need for significant additional evidence gathering, and to ensure changes in local and national policy were addressed, including the new requirement to produce a Local Aggregates Assessment. It also reflected staff reductions. However, performance against the 2015 LDS was off target during 2016 and 2017, with activity behind schedule. The LDS can be viewed at www.worcestershire.gov.uk/lds.

2.3. The Draft Plan (Third Stage) consultation was due to be undertaken in Spring/Summer 2016 however this took place between Autumn 2016 and Spring 2017.

2.4. Responses to this consultation highlighted that further work was required to ensure an effective plan was produced. Therefore, the changes required to the Minerals Local Plan were more comprehensive than anticipated, taking longer than expected and requiring a further stage of consultation which was not scheduled in the 2015 LDS.

2.5. A revised LDS was therefore adopted on 20th July 2017. It updated the timetable for the preparation of the Worcestershire Minerals Local Plan to reflect the need to undertake an additional call for sites and a further additional stage of consultation on the Minerals Local Plan to address issues in relation to the Spatial Strategy (policies in the local plan which govern the location of minerals sites), and also set out the timetable for commencing of a review of the adopted Waste Core Strategy.

2.6. Performance against this revised LDS was on track for the remainder of the 2017 monitoring period, with the fourth call for sites taking place from September 2017 to January 2018.

Conclusion

2.7. Significant progress was made during the monitoring period towards drafting the Minerals Local Plan in accordance with the 2017 LDS scheduling Fourth Consultation (Regulation 18) for late-2018. The 4th call for sites also took place from September 2017 to January 2018. Therefore, no action is required.

Community Involvement

Summary of indicators in this section

Table 2Summary of SCI indicator performance

Indicator	Target	2016 Result	2017 Result
SCI1: Satisfaction levels with the Development Plan process/service.	Satisfaction with consultation methods employed.	86% satisfaction	86% satisfaction
SCI2: Response rates to planning policy consultations.	The SCI does not set specific targets.	7.7%	7.7%
SCI3: Satisfaction levels with the planning application process/service.	Zero complaints upheld by the Local Government Ombudsman, court decisions against the council or, appeals upheld.	No complaints or appeals upheld	No complaints or appeals upheld

Indicator analysis

SCI 1: Satisfaction levels with the Development Plan process/service

3.1. As part of the Third Stage Consultation on the Minerals Local Plan undertaken between Autumn 2016 and Spring 2017, consultees were asked about their satisfaction with the consultation process. Eight consultees responded to this question, with 7 (86%) stating satisfaction with the process. The one consultee who expressed dissatisfaction stated that "The questions are admirable, but the complexity produces issues which in practice are not considered."

3.2. It is recognised that the consultation document was a large and detailed document; however, it is believed that this was necessary and unavoidable due to the technical nature of the subject.

3.3. Therefore, it has been determined that this indicator has met its target in both monitoring periods.

SCI 2: Response rates to planning policy consultations

3.4. Indicator SCI2: Response rates to planning policy consultations has no set target. Although response rates are relatively easy to measure, they do not necessarily indicate satisfaction with the Development Plan or consultation process. A low response rate could indicate general satisfaction with proposals meaning that people did not feel the need to respond, or it could indicate that consultation methods have not been satisfactory in engaging interest or enabling participation in the process. A high response rate may indicate a good level of positive involvement, or a high level of dissatisfaction, or increased interest due to a particular development proposal.

3.5. During 2016 and 2017 the Third Stage Consultation on the Minerals Local Plan was undertaken, this consultation attracted at 7.7% response rate, in comparison with 8.9% received as part of the Second Stage Consultation in 2014, which was the last

consultation undertaken of a similar scope able to be compared. Although this is a slight drop, the change in the response rate is not considered to be significant enough to indicate a need for any action to be taken.

SCI 3: Satisfaction levels with the planning application process/service

3.6. One appeal was determined in 2016. This was for a proposed extension of a yard associated with an existing waste transfer station. The application was refused by the Council due to the location of the development, and the effect on the character and appearance of the area. The appeal was subsequently dismissed.

3.7. No applications were made to, or judgements made by, the High Court about Worcestershire County Council's planning service or decisions during the monitoring period.

Conclusion

3.8. There are three indicators monitoring the performance of community involvement. **Indicator SCI1: Satisfaction levels with the Development Plan process/service** was judged to have met its target with an 86% satisfaction rate. Performance of the other two indicators shows adequate performance in this monitoring period. Therefore, the performance of this group of indicators has been judged to be performing well and no action is required.

Waste Core Strategy indicators

Introduction

4.1. The adopted Waste Core Strategy Local Plan includes 8 plan objectives and a monitoring schedule which sets out indicators, targets and milestones to monitor the achievement of these objectives. The AMR reports on these indicators and includes 5[2] supplementary indicators where greater clarity was needed to be able to assess the performance of the objectives of the Waste Core Strategy.

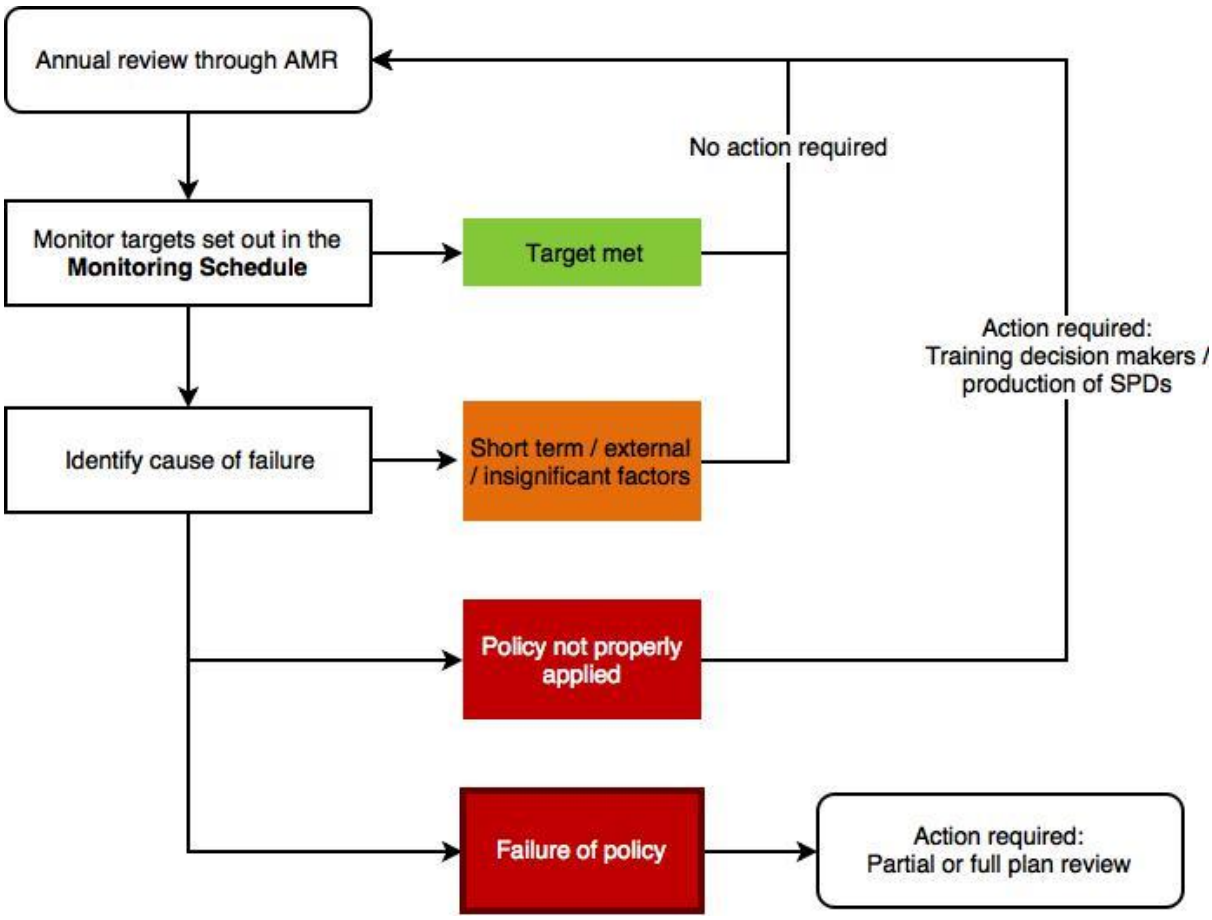
4.2. The structure of this AMR assesses the performance of each of the Waste Core Strategy objectives in turn, based on the performance of the indicators. Each objective contains a summary of the indicators, objective performance and whether any actions have been identified, followed by analysis of each indicator, and an overall conclusion of the performance of the objective. This is intended to make the assessment of the plan more transparent. In addition, the analysis of indicators is split into a textual analysis, with data tables found in Appendix A, rather than embedded in the text as was the case in previous AMRs.

4.3. As there are multiple indicators monitoring each objective it is possible that in some cases one target or milestone can be missed without compromising the delivery of the objective in the long-term, however in other cases the failure to meet a single target or milestone might be of such significance that there is considered to be a failure in delivering the objective. Where relevant, the rationale for such decisions is set out in the conclusion to the objective analysis. The approach is consistent to the monitoring process set out in figure 18 in the adopted Waste Core Strategy, which has been amended and set out below in figure 1 to provide greater clarity.

4.4. If monitoring indicates that targets have been missed, the process outlined in Figure 1 will be followed. This process will establish whether a failure to meet a target is significant, in which case the Waste Core Strategy may need to be reviewed, or whether it is the result of short-term or other factors which are not significant. It may also be possible to correct some failures through mechanisms such as adopting a Supplementary Planning Document (SPD) rather than formally reviewing the entire Strategy.

[2] W16b, W16c, W16d, W17d, W25b

Figure 1. Indicator review process.



WO1: Basing decisions on the need to reduce greenhouse gas emissions and to be resilient to climate change.

Summary of indicators in this section

Table 3. Summary of objective 1 indicator performance

Indicator	Target	2016 Result	2017 Result
W1: Permissions for waste management development granted contrary to the EA advice on flooding	0 (Zero)	0	0
W2: Permissions for waste management development granted contrary to the EA advice on water quality	0 (Zero)	0	0
W3: Permissions for waste management development that include measures for energy efficiency	100%	0%	0%
W4: Permissions for waste management development with a gross floor space of over 1000m2 gaining at least 10% of energy supply annually from renewable energy supplies	100%	No relevant Applications	No relevant Applications
W5: Permissions for waste management development that include measures for water efficiency	100%	No relevant Applications	No relevant Applications
W6: Permissions for new landfill capacity that include landfill gas management systems	100%	No relevant Applications	No relevant Applications

Indicator analysis

4.5. There are 6 indicators that monitor the performance of this objective. **Indicators W1: Permissions for waste management development granted contrary to the EA advice on flooding** and **W2: Permissions for waste management development granted contrary to the EA advice on water quality** both met their target in both monitoring years, with no applications being approved against the Environment Agency's advice on these issues.

4.6. The target for **indicator W3: Permissions for waste management development that include measures for energy efficiency** was not met in either monitoring year, with no approved new waste management facilities including measures for energy efficiency. This indicator has failed in the past and previous AMRs expected the Validation Document (adopted in February 2015) to improve the performance of this indicator, however this has not been the case. Further investigation has established that the failure of this indicator is due to the nature of applications in this monitoring period. In 2016 the only application for new built development was for two further digesters at an existing plant, this gave little scope to apply the relevant policy (WCS11) which requires proposals to demonstrate that "the design of buildings, layout, landscaping and operation of the facility… [reduce] energy demand where possible and considering energy efficiency in the design and operation of all new built development". Similarly, in 2017 the only application for new built development was for an Incinerator Bottom Ash processing and

recovery facility at an active landfill site, also giving little scope to apply policy WCS11 due to its location. It is therefore considered that the failure of this indicator to meet targets is not significant and does not indicate a failure of the Waste Core Strategy's policies and no specific action is required.

4.7. There were no applications in either monitoring period relevant to indicators:

- **W4: Permissions for waste management development with a gross floor space of over 1000m2 gaining at least 10% of energy supply annually from renewable energy supplies; or**
- **W5: Permissions for waste management development that include measures for water efficiency**
- **W6: Permissions for new landfill capacity that include landfill gas management systems.**

Conclusion

4.8. Three of the indicators monitoring the performance of this objective had no relevant applications in this monitoring period. Of the remaining three indicators, two met their targets. **Indicator W3: Permissions for waste management development that include measures for energy efficiency** failed to meet its target due to the nature of the applications in this monitoring period having a lack of suitable opportunities to implement measures for energy efficiency. However, no action is required at this time.

4.9. Therefore, it has been determined that this objective is being delivered.

WO2: Basing decisions on the principles of sustainable development by protecting and enhancing the County's natural resources, environmental, cultural and economic assets, the character and amenity of the local area and the health and wellbeing of local people.

Summary of indicators in this section

Table 4. Summary of objective 2 indicator performance

Indicator	Target	2016 Result	2017 Result
W7: Permissions for new built waste management development that include provision for biodiversity enhancement	100%	100%	0%
W8: Permissions that have an unacceptable adverse impact on landscape character, scheduled ancient monuments, listed buildings, conservation areas, battlefields or registered historic parks and gardens	None	0	0
W9: Permissions for new waste management development granted in the Malvern Hills or Cotswolds AONB	No unacceptable adverse change	0	0
W10: Permissions for waste new management development that take into account local characteristics	No unacceptable adverse impact	No unacceptable adverse impact	No unacceptable adverse impact
W11: Permissions for new waste management development [that] take into account amenity considerations	No unacceptable adverse impact	No unacceptable adverse impact	No unacceptable adverse impact
W12: Permissions for new waste management development on greenfield sites	None	1	0
W13: Permissions for new waste management development in the Green Belt	No unacceptable cumulative impact on the purposes of Green Belt designation	No unacceptable cumulative impact on the purposes of Green Belt designation	No applications permitted in the Green Belt
W14: Permissions granted in accordance with highways advice.	100%	100%	100%

Indicator analysis

4.10. The indicators monitoring this objective show good results, with only one indicator failing to meet its targets in 2017. This was **indicator W7: Permissions for new built waste management development that include provision for biodiversity enhancement** where one application for new built waste management was permitted without provision for biodiversity enhancement in 2017. This was due to this application being for an Incinerator Bottom Ash processing and recovery facility at an active landfill site, leading to no opportunities for biodiversity enhancement, as acknowledged by the comments from the WCC ecologist. It is therefore considered that the failure of this indicator to meet targets is not significant and does not indicate a failure of the Waste Core Strategy's policies and no specific action is required.

4.11. The targets for the following indicators were achieved in both monitoring years:

- **W8: Permissions that have an unacceptable adverse impact on landscape character, scheduled ancient monuments, listed buildings, conservation areas, battlefields or registered historic parks and gardens;**
- **W10: Permissions for new waste management development take into account local characteristics;**
- **W11: Permissions for new waste management development take into account amenity considerations;** and
- **W14: Permissions granted in accordance with highways advice.**

4.12. There were no applications granted within the Malvern Hills or Cotswolds AONB, meaning indicator **W9: Permission for new waste management granted in the Malvern Hills or Cotswolds AONB** also met its target.

4.13. In 2016, one application was approved on a greenfield site, however this was an extension to an existing site which was deemed acceptable in the committee report due to other material considerations. Therefore, it is considered that this is not a significant failure of **indicator W12: Permission for new waste management development on Greenfield sites**. In 2017, no applications were approved for waste management facilities on greenfield sites, therefore the target for **indicator W12: Permission for new waste management development on Greenfield sites** has been met in this year.

4.14. In addition, in 2016, two applications were approved within the Green Belt. One of these applications was for a change of use from light industrial to Sui Generis (Application 15/000037/CM), therefore it was not considered that this application would have an unacceptable cumulative impact on the purposes of Green Belt designation. The other application approved in 2016 was for a change of use of agricultural buildings and associated land to a Material Reclamation Facility (Application 16/000021/CM). In the committee report for this application it was outlined that this application would not have a greater impact on the openness of the Green Belt than the existing agricultural buildings and would not conflict with the five purposes of Green Belt. In addition, it was considered that the proposal would fall under the Green Belt exemptions (paragraph 90: 'the re-use of buildings provided that the buildings are of permanent and substantial construction'). Therefore, **indicator W13: Permission for new waste management development in the Green Belt** met its target in 2016.

4.15. In 2017, no applications were granted within the Green Belt, therefore indicator **W13: Permission for new waste management development in the Green Belt** met its target in 2017.

Conclusion

4.16. Overall this objective is being achieved. Seven of the indicators monitoring the performance of this objective met their targets in 2017. **Indicator W7: Permissions for**

new built waste management development that include provision for biodiversity enhancement failed to meet its target due to a single application where specific circumstances limited the scope to apply policy WCS 9. However, no action is required at this time.

4.17. Therefore, it has been determined that this objective is being delivered.

WO3: Making driving waste up the waste hierarchy the basis for waste management in Worcestershire

Summary of indicators in this section

Table 5. Summary of objective 3 indicator performance

Indicator	Target	2016 Result	2017 Result
W16a: Local Authority Collected Waste sent to landfill	Decrease in % of waste managed sent to landfill	Decrease	Decrease
W16b: Commercial and Industrial waste sent to landfill	Decrease in % of waste managed sent to landfill	Decrease	Decrease
W16c: Construction and Demolition waste sent to landfill	Decrease in % of waste managed sent to landfill	Unable to monitor	Unable to monitor
W16d: Hazardous waste sent to landfill	Decrease in % of waste managed sent to landfill	Increase	Decrease
W17a: Re-use, recycling and 'other recovery' of LACW waste	By 2020: 78% with minimum of 50% re-use and recycling	Below milestone	Below milestone
W17b: Re-use, recycling and 'other recovery' of Commercial and Industrial waste	By 2020: 75% with minimum of 55% re-use and recycling	Good performance	Good performance
W17c: Re-use, recycling and 'other recovery' of Construction and Demolition waste	By 2020: 75% with minimum of 55% re-use and recycling	Unable to monitor	Unable to monitor
W17d: Re-use, recycling and 'other recovery' of Hazardous waste	By 2020: 75%	Below milestone	Below milestone
W18: Adoption of appropriate policies regarding managing waste arisings from all new development in City, Borough and District Councils DPDs	Adopted by all City, Borough and District Councils	Adopted by all City, Borough and District Councils	Adopted by all City, Borough and District Councils
W20: Progress towards equivalent self-sufficiency in re-use and recycling capacity based on headline delivery milestones in Table 5 and Policy WCS 2.	Achievement of headline delivery milestones in	Achieved	Achieved

Indicator	Target	2016 Result	2017 Result
	Table 5 and Policy WCS 2.		

Indicator analysis

4.18. There are 10 indicators that monitor the performance of this objective.

4.19. There is significant overlap between **Indicator W15: Progress towards equivalent self-sufficiency in re-use and recycling** and **Indicator W20: progress towards self-sufficiency in re-use and recycling capacity** based on headline delivery milestones in Table 5 and Policy WCS2 as set out in the Waste Core Strategy.

4.20. In this AMR indicator W15: Progress towards equivalent self-sufficiency in re-use and recycling is now monitored under **Indicator W20: progress towards self-sufficiency in re-use and recycling capacity** based on headline delivery milestones in Table 5 and Policy WCS2, to avoid duplication caused by both indicators using the same target. This is reported in chapter 4.8.

4.21. **Indicator W16: Waste sent to landfill** and **Indicator W17: Re-use, recycling and 'other recovery' of waste** are each split into four parts:

- part a for Local Authority Collected Waste,[3]
- part b for Commercial and Industrial waste,[4]
- part c for Construction and Demolition waste,[5] and
- part d for Hazardous waste.[6]

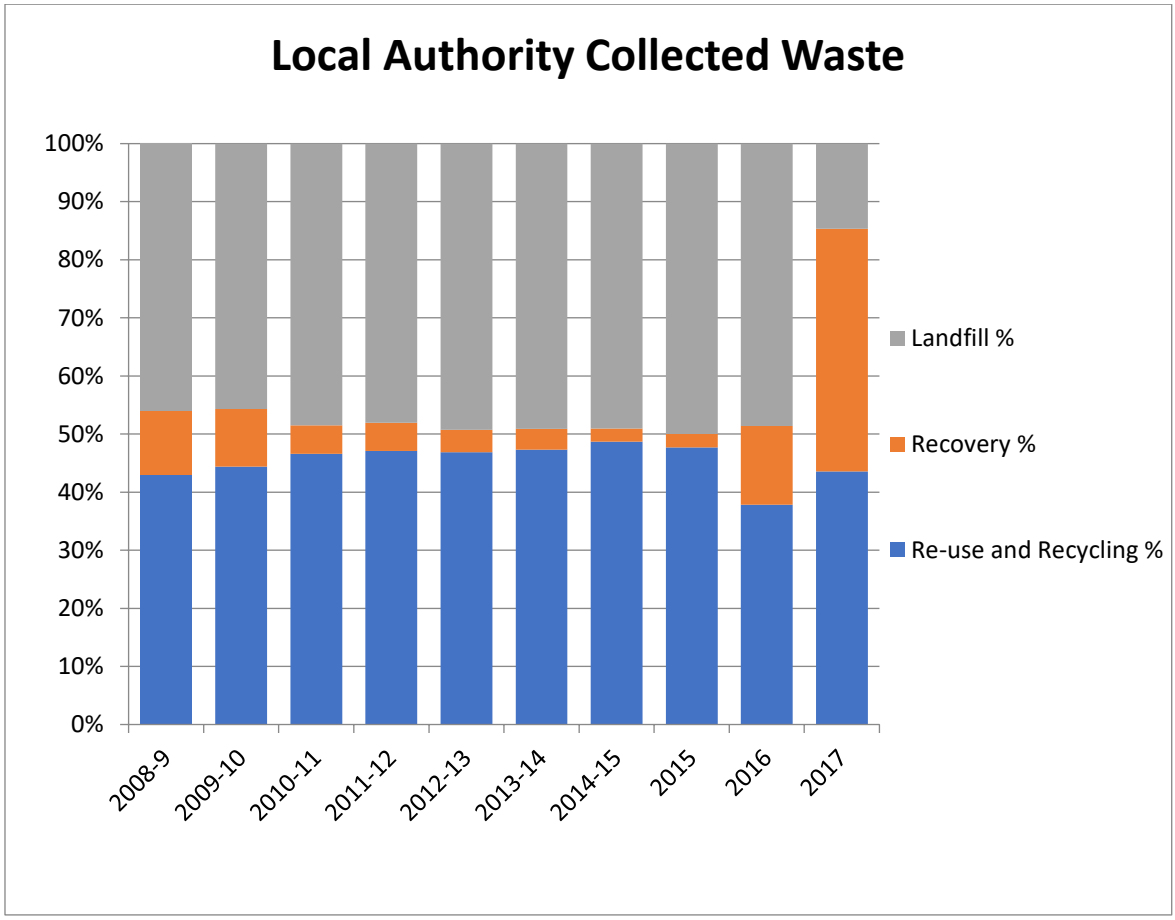
4.22. **Indicators W16: Waste sent to landfill** and **W17: Re-use, recycling and 'other recovery'[7] of waste** monitor different aspects of waste management, but these treatment options constitute the main components of waste management. This means that there is an inverse relationship between them, for example a fall in landfill rates would be mirrored by a corresponding increase in recycling and 'other recovery' rates.

Local Authority Collected Waste

4.23. Figure 2 shows the proportion of Local Authority Collected Waste (LACW) produced in Worcestershire that was managed at each level of the waste hierarchy.[8] It shows that in 2017 43.5% of LACW waste was sent for re-use or recycling, 41.8% underwent recovery processes and just 14.7% was sent to landfill. Whereas, in 2016 37.9% of waste underwent reuse and recycling, 13.7% underwent recovery and 48.6% went to landfill.

[3] Waste collected by local authorities, principally domestic waste.
[4] Includes commercial waste arising from wholesalers, catering establishments, retail premises and offices, and industrial waste arising from factories, industrial plants, and packaging waste.
[5] Waste produced as a result of building, engineering or other activities which include construction, demolition or excavation.
[6] Waste that contains hazardous properties that may render it harmful to human health.
[7] 'Other recovery' is defined in the Waste Core Strategy as "any recovery facilities" that do not fall into the category of 're-use', 'recycling' or 'disposal'.
[8] In this AMR the monitoring period has changed from financial years to calendar years.

Figure 2. Worcestershire's Local Authority Collected Waste shown by management method (data from the Environment Agency Waste Data Flow).



Indicator W16a

4.24. Landfill rates of LACW have reduced in each of the monitoring years, with a landfill rate of 15% in 2017, meeting the target for **Indicator W16a: Waste sent to landfill**.

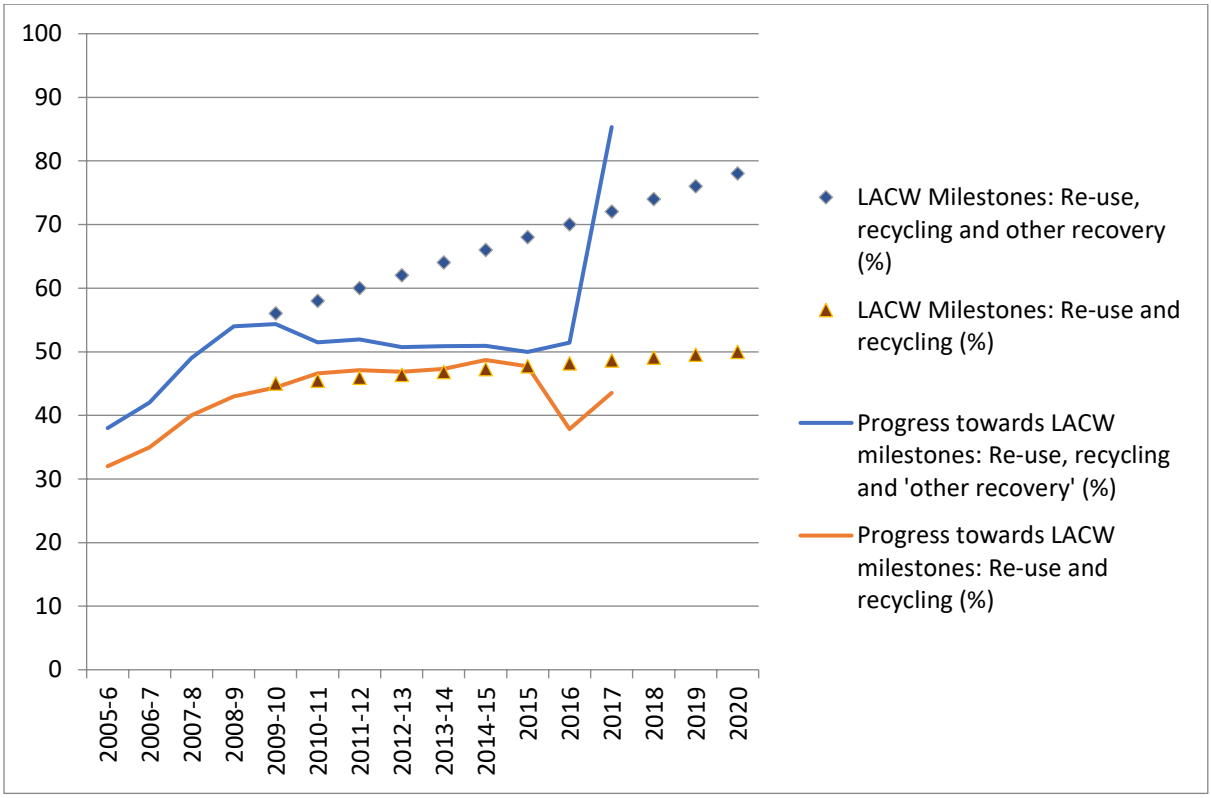
Indicator W16b

4.25. **Indicator W17a: Re-use, recycling and 'other recovery' of waste** monitors recycling and recovery rates for LACW. **Table 1** shows the targets and baseline for LACW recycling/recovery rates. **Figure 3** shows progress towards these targets.

Table 6. LACW Recycling and Recovery targets and baseline

	2009-10	2015-16[9]	2020-21[10]
LACW (re-use and recycling)	45%	48%	50%
LACW (re-use, recycling & other recovery)	56% (Baseline)	68%[11]	78%

Figure 3. Recycling/Recovery rates and baseline targets (LACW).



4.26. Progress towards LACW reuse and recycling targets is poor. In 2016 the re-use and recycling rate dropped to 38%, before increasing to 44% in 2017. Despite this increase the re-use and recycling rate is approximately 5% below the indicative milestone for 2017, therefore if this trend continues the target of 50% re-use and recycling in 2020 risks not being achieved.

4.27. The contribution of 'other recovery' has risen from 2% in 2015 to 14% in 2016, and 42% in 2017. This means that the overall proportion of waste being re-used, recycled or undergoing other recovery is 85% for this monitoring period12. This is above the indicative milestone for 2017 of 72% and indicates good performance towards achieving the target of 78% re use, recycling and other recovery by 2020. This

[9] In previous years this milestone was incorrectly listed as 2014-15.
[10] In previous years this milestone was incorrectly listed as 2019-20.
[11] In previous years this target was incorrectly listed as 65.8%.
[12] 51% in 2016

increase in 'other recovery' is likely to be largely due to the opening of an Energy from Waste facility in Worcestershire to manage LACW arising in Worcestershire and Herefordshire with a capacity of 200,000tpa in early 2017.

Action

4.28. Re-use and recycling of LACW is below target. However, this is not considered to be due to a failure in the Waste Core Strategy. No applications for additional re-use or recycling capacity have been refused by the County Council in the monitoring period. Waste management in Worcestershire is managed alongside Herefordshire through a joint working arrangement. This is set out in the Joint Municipal Waste Strategy (2004). A review of the Joint Municipal Waste Strategy in 2011 stated that the Partnership is still committed to supporting its contribution to the national target by maintaining the current level of performance and, where financially viable, introducing new initiatives to improve overall performance. However, current budget and staffing constraints mean that significant awareness raising to increase participation, or major changes to the services provided, to increase performance is not possible. Therefore, it has been judged that the Waste Core Strategy is not responsible for this failure and no action is required.

Commercial and Industrial waste

Data limitations

4.29. **Indicators W16b: C& I Waste sent to landfill** and **W17b: Re-use, recycling and 'other recovery' of C&I waste** seek to monitor how Commercial and Industrial waste arising in Worcestershire is managed. However, there is no reliable data available to assess this.

4.30. The Environment Agency Waste Data Interrogator (WDI) gives combined data for Household[13] and C&I waste managed in Worcestershire. This is the best available data and will be used unless better data becomes available in the future. However, there are several limitations with this data:

- It does not record the geographical origin of the waste managed.
- It does not record waste managed under an Environment Agency exemption[14].

4.31. Waste managed at Energy from Waste facilities is not recorded in the WDI. This is due to these facilities being classed by the Environment Agency as industrial and benefitting from industrial installation permits not waste management permits. Therefore, WDI data has been supplemented with Environment Agency Waste management for England Official Statistics which provides data for the Incineration Input and Capacity for Municipal and/or Industrial & Commercial waste streams, however planning permissions must also be referred to in considering whether this is recovery or disposal capacity.

4.32. There are additional issues with the data available from the WDI for Worcestershire, as the WDI does not provide consistent data for waste management operations in the county. When analysing the data in the WDI to assess landfill and recycling rates it was identified that for the years 2009, 2013 and 2014 there is data missing for at least one of the three active landfill sites in the county, but with no consistency over which sites were missing in each of the years. It is estimated that this could potentially account for between 20% and 80% of Worcestershire landfill

[13] Please note, LACW and Household waste streams are not interchangeable, therefore LACW cannot be deducted from HCI figures to derive C&I data.

[14] A waste exemption is a waste operation that is exempt from needing an environmental permit from the Environment Agency. Each exemption has specific limits and conditions that the holder must operate within.

throughput depending in the site in question. This impacts on the ability to assess landfill rates but also the recycling and recovery rates as the total waste managed is not known. This is reflected in the analysis below.

Performance

Indicators W16b: C&I waste sent to landfill and W17b: Re-use, recycling and 'other recovery' of C&I waste

4.33. **Indicator W17b: Re-use, recycling and 'other recovery' of waste** monitors recycling and recovery rates for commercial and industrial waste. **Error! Reference source not found.** shows the targets and baseline for C&I recycling/recovery rates. Figure 4 shows progress towards these targets.

Table 7. C&I Recycling and Recovery targets and baseline.

	2009	**2015**	**2020**
C&I targets (Re-use and recycling)	36% (Baseline)	46.5%	55%
C&I targets (re-use, recycling & 'other recovery')	36% (Baseline)	57.3%	75%

Figure 4. Recycling/Recovery rates (HCI) and baseline targets (C&I)

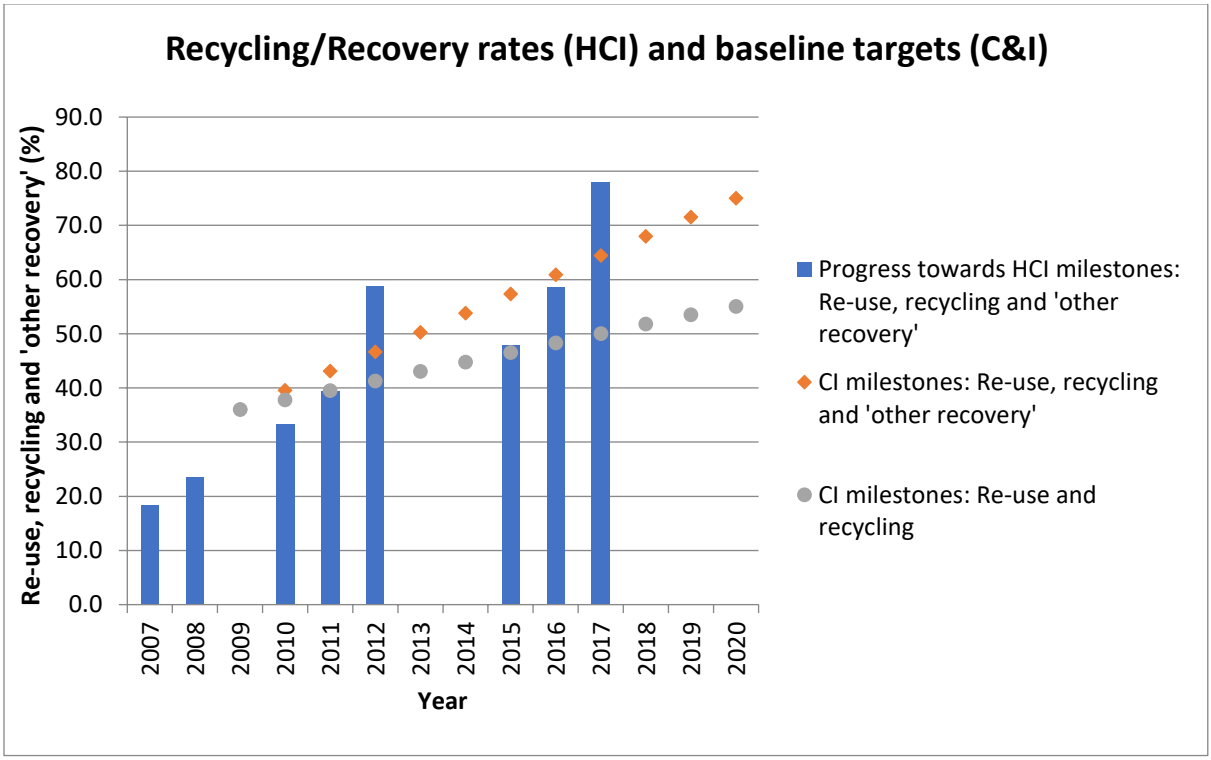
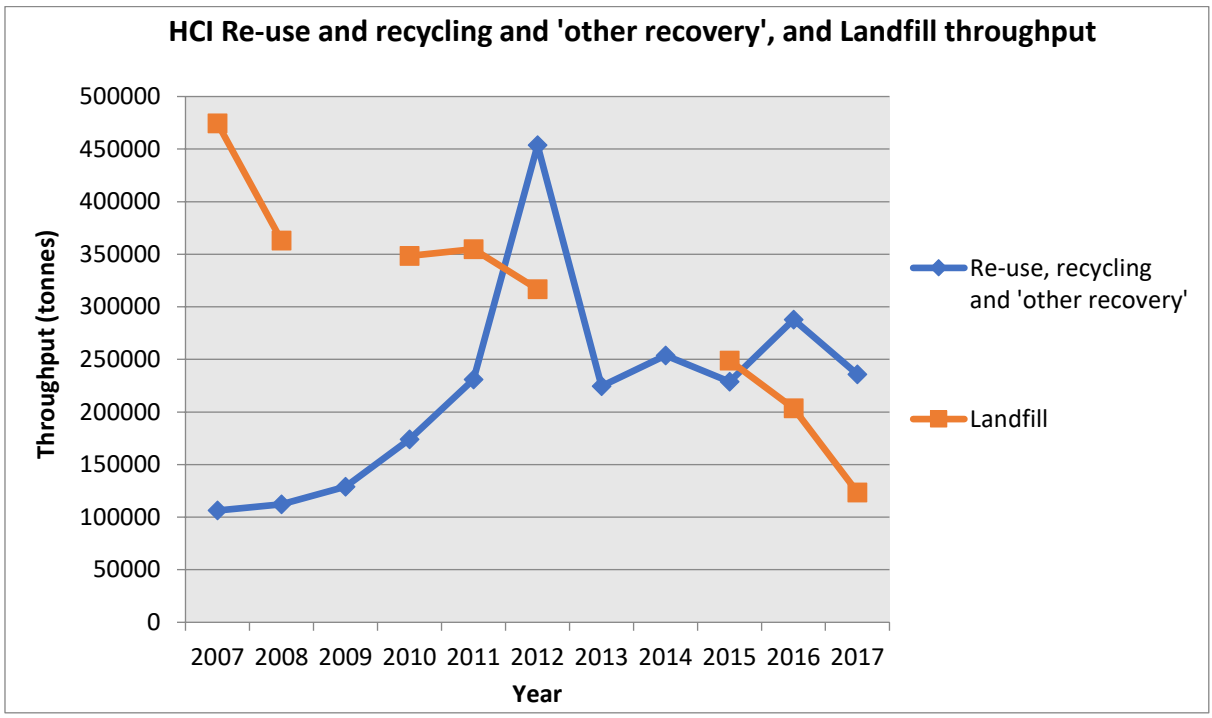


Figure 5. HCI Re-use and recycling, and Landfill throughput.



2016

4.34. The county saw a small increase in overall re-use, recycling and other recovery throughput in 2016 compared to 2015 (from 228,750 tonnes to 278,872 tonnes).

4.35. The percentage of HCI waste disposed of at the county's landfill sites was 41% in 2016, a decrease from the 52% seen in 2015. This represents a 45,000 tonne reduction in the quantity of waste going to landfill.

2017

4.36. Re-use, recycling and other recovery of HCI waste increased to 77.9% in 2017, far above the 64.4% milestone for 2017. This is due in part to the Worcester Sewage Treatment Works, which saw a return to throughput comparable to 2013 levels after the significant increase in throughput in 2014. Dialogue with the operator to determine the cause of this fluctuation in waste managed is ongoing. Throughput at Sims recycling centre at Long Marston remained similar to 2014 levels.

4.37. However, this is largely due to the opening of an Energy from Waste site at Hartlebury providing 200,000tpa of 'other recovery'. The throughput of re-use and recycling sites decreased by 52,000 tonnes.

4.38. The tonnage of waste disposed of at the county's landfill sites was 40% lower in 2017 than 2016. Accounting for 22% of HCI waste managed.

4.39. Whilst some caution should be applied in the interpretation of this data due to the difficulty in assessing how the C&I portion of the HCI waste stream may have been managed, due to the decrease in the percentage of HCI waste sent to landfill in this monitoring period, indicator W16b: C&I waste sent to landfill has met its target.

4.40. In addition, due to the increase in the percentage of HCI waste managed by re-use, recycling or 'other recovery' operations in this monitoring period, **indicator W17b: Re-use, recycling and 'other recovery' of C&I waste** has met its target.

Action

4.41. Progress towards 75% re-use, recycling and other recovery by 2020 is above target (when considering HCI, rather than C&I), with the 2020 target being achieved in 2017. In addition, the proportion and quantity of waste sent to landfill has continued to decrease in Worcestershire. Therefore, no action is required at this time. Alternative data sources to enable full analysis of the management of the C&I waste stream will be considered should they become available for future AMRs.

Construction and Demolition Waste

4.42. **Indicator W16c: C&D waste sent to landfill** and **W17c: Re-use, recycling and 'other recovery' of C&D waste** seeks to monitor recycling and recovery rates for Construction and Demolition (C&D) waste. There is no reliable data however on how C&D waste arisings in Worcestershire are managed. The lack of reliable data is a concern nationally and was acknowledged in 2013 by the Chartered Institution of Wastes Management (CIWM).[15] As of 2017 this concern was ongoing and not resolved. 75% recycling and recovery will be retained as a target for C&D waste and this will be monitored if better data becomes available in the future, but at present it is not possible to monitor this effectively.

Hazardous Waste

Data Limitations

4.43. **Indicators W16d: Hazardous waste send to landfill** and **W17d: Re-use, recycling and 'other recovery of Hazardous waste** seek to monitor how hazardous waste is managed in Worcestershire. The best available data for this comes from the Environment Agency Hazardous Waste Data Interrogator (HWDI).[16] However, this dataset has a number of limitations.

4.44. This dataset records re-use, recycling and 'other recovery' together as "Recovery". Because of this, re-use and recycling trends cannot be monitored separately, and therefore these indicators only monitor the targets for re-use, recycling and 'other recovery'.

Performance of Indicators W16d: Hazardous waste sent to landfill and W17d: Re-use, recycling and 'other recovery' of Hazardous waste

4.45. **Indicator W17d: Re-use and recycling and 'other recovery' of Hazardous waste** monitors recycling and recovery rates for hazardous waste. Table 4 shows the targets and baseline for hazardous re-use, recycling and 'other recovery'. Figure 6 shows progress towards these targets.

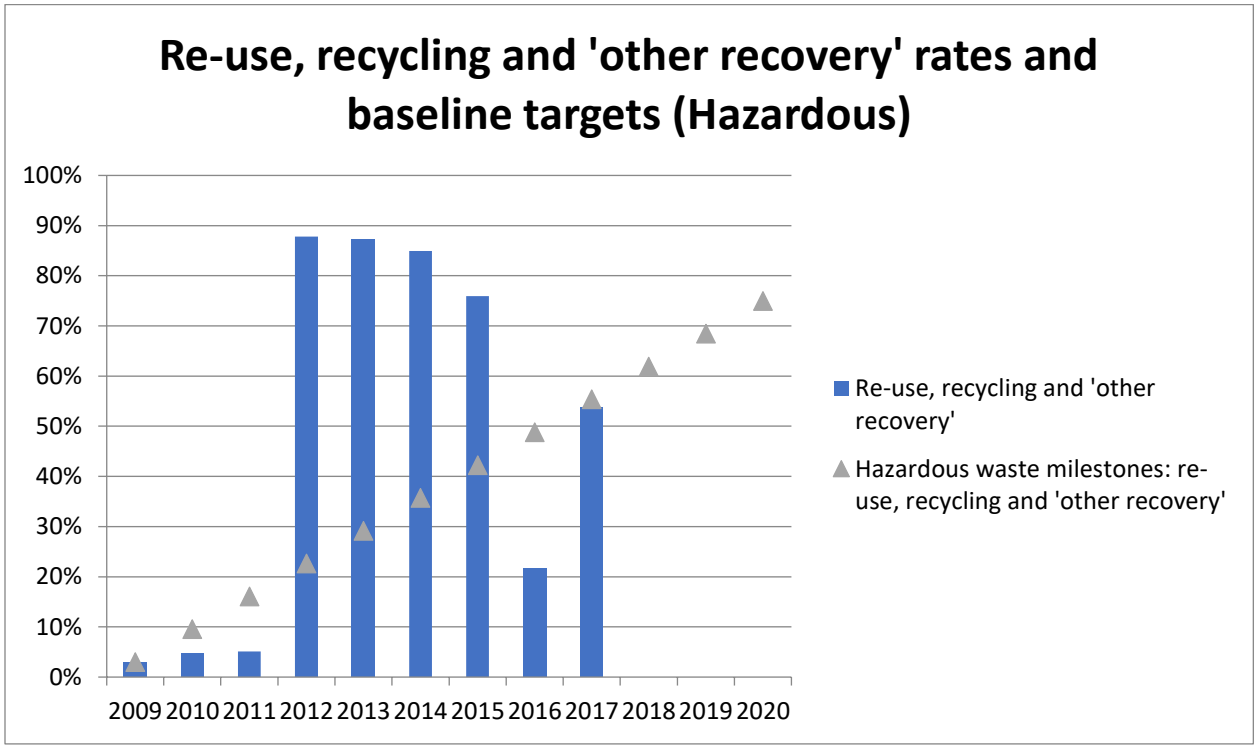
[15] CIWM Report 2013 "Commercial and Industrial Waste in the UK and Republic of Ireland"

[16] Although hazardous waste is recorded in the Waste Data Interrogator, this dataset is known to incomplete and as such, the Environment Agency do not advise the use of the Waste Data Interrogator for reporting on Hazardous waste.

Table 8. Hazardous Recycling and Recovery targets and baseline.

	2009	2015	2020
Hazardous (re-use, recycling & recovery)	3% (Baseline)[17]	42.3%[18]	75%

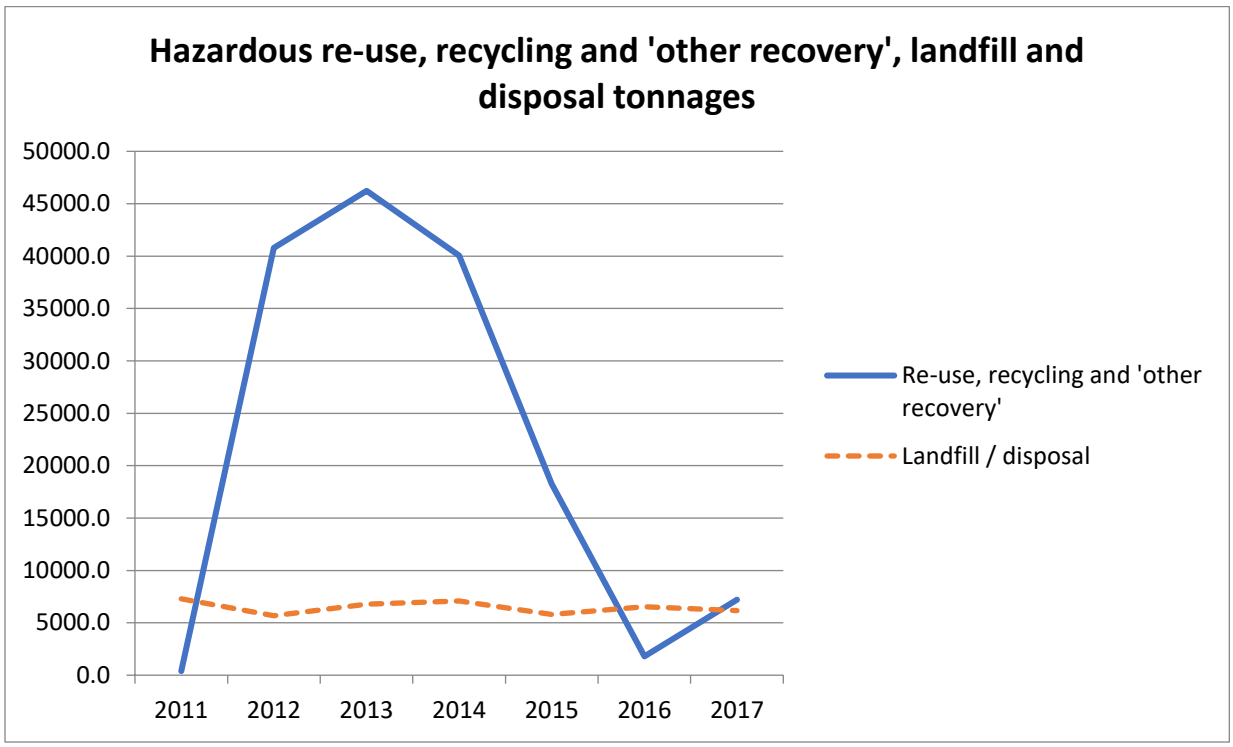
Figure 6. Hazardous waste Re-use, recycling and 'other recovery' rates and baseline targets.



[17] Baseline figure has been calculated using the method used to calculate the baseline for C&I waste streams.

[18] Interim targets have been calculated to create an incremental rise between the baseline and 2020 target figures.

Figure 7. Hazardous re-use, recycling and 'other recovery', landfill and disposal tonnages



2016

4.46. Between 2015 and 2016 re-use, recycling and other recovery rates dropped from 76% to 22%, the fourth year in a row where rates declined. This was due to a 91% decrease in the tonnage of waste being managed in this way. Given the limitations of the hazardous waste data interrogator it is not possible to identify if this was from decrease in throughput at a single or multiple sites. The percentage of hazardous waste being re-used, recycled or recovered was 22%, far below the target of 49% in 2016 and therefore **indicator W17d: Re-use, recycling and 'other recovery' of Hazardous waste** failed to meet its target.

4.47. The percentage of hazardous waste sent to landfill increased from 24% in 2015 to 78% in 2016, however this is largely due to a decrease in in total waste managed in the county from 24000 tonnes in 2015 to 8300 tonnes in 2016. In the 2016 monitoring year, 1.2 tonnes of this waste was sent to landfill, with an additional 6550 tonnes being disposed of through incineration without energy recovery. This is assumed to be the incineration of clinical waste at a facility in Redditch.

4.48. Due to the rise in the percentage of hazardous waste sent to landfill or disposal W16d: hazardous waste sent to landfill or disposal failed to meet its target in 2016.

2017

4.49. Between 2016 and 2017 the tonnage of hazardous waste sent to landfill or disposal fell by 6% to 6100 tonnes. The percentage of waste sent to landfill or disposal fell from 78% to 46% in 2017, therefore indicator **W16d: Hazardous waste sent to landfill or disposal** has met its target in this monitoring period. No hazardous waste was landfilled in the county in 2017, with 6200 tonnes being disposed of through incineration without energy recovery. This is assumed to be the incineration of clinical waste at a facility in Redditch.

4.50. The percentage of hazardous waste being managed through re-use, recycling or other recovery increased from 22% in 2014 to 54% in 2015. This was due to a 390%

increase in the tonnage of waste being re-used, recycled or undergoing 'other recovery' from 1800 tonnes to 7200 tonnes. Due to limitations in the data it is impossible to assess the cause of this rise on a site-by-site basis. Overall, re-use and recycling rates stood at 54%, slightly below the 2017 target of 55%. Therefore, **indicator W17d: Re-use and recycling of waste** has failed to meet its target in this monitoring period.

Action

4.51. Although re-use, recycling and "other recovery" rates for hazardous waste rose in 2017, they are slightly below target. However, this failure is marginal; therefore, no action is required to improve performance against **indicator W17d: Re-use, recycling and 'other recovery' of Hazardous waste**.

4.52. As **indicator W16d: Hazardous waste sent to landfill or disposal** has met its target in 2017, no action is required to improve the performance of indicator W16d.

Development Plan Documents (DPDs)

4.53. The Waste Core Strategy is the Development Plan Document for waste planning in Worcestershire and should be read alongside the City, Borough and District Councils' Local Plans. However, there is a need to ensure that other Development Plan Documents do not inadvertently contradict the requirements of the Waste Core Strategy, and to ensure that they encourage sustainable waste management solutions to be embedded within non-waste management development.

4.54. There were 3 DPDs adopted within the monitoring period relevant to indicator **W18: Adoption of appropriate policies regarding managing waste arisings from all new development in City, Borough and District Councils' Development Plan Documents**. These were: The South Worcestershire Development Plan (adopted 2016), Bromsgrove District Plan (adopted 2017), and the Borough of Redditch Local Plan (adopted 2017). All these DPDs include appropriate policies regarding managing waste arisings. Therefore, indicator W18: Adoption of appropriate policies regarding managing waste arisings from all new development in City, Borough and District Councils' Development Plan Documents has met its target. In addition, the Council formally commented on waste matters during the preparation of the Wyre Forest Local Plan. There were no other development plans in Worcestershire being consulted on in this monitoring period.

Conclusion

4.55. Re-use and recycling rates of Local Authority Collected Waste (LACW) show good performance, and landfill rates of LACW have remained steady. The factors which have affected the performance of re-use, recycling rates of LACW in this monitoring period are not considered to be significant in terms of performance of the Waste Core Strategy.

4.56. The performance against Commercial and Industrial Waste (C&I) indicators **W16b** and **W17b** is difficult to assess as C&I waste data is only available alongside household waste data as Household, Commercial and Industrial waste (HCI). In addition, there are deficiencies in the data currently available from Defra with significant gaps in treatment data for 3 of the last 8 years. However, performance targets for re-use, recycling and 'other recovery' rates, and landfill rates have failed to be met in this monitoring period.

4.57. There is no data available to monitor C&D waste at the current time.

4.58. Re-use, recycling and other recovery rates of Hazardous waste have risen slightly in this monitoring year, although no action has been identified as being required

at this time despite rates failing to show progress towards meeting the target of 75% by 2020. Landfill and disposal rates of hazardous waste rose, although no action has been identified to improve performance.

4.59. There were three DPDs adopted within the monitoring period relevant to indicator W18: Adoption of appropriate policies regarding managing waste arisings from all new development in City, Borough and District Councils' Development Plan Documents, all three DPDs included appropriate policies for managing waste arisings.

4.60. The overall performance of this objective cannot be assessed due to incomplete data.

WO4: Ensuring that the waste implications of all new development in Worcestershire are taken into account.

Summary of indicators in this section

Table 9. Summary of objective 4 indicator performance

Indicator	Target	2016 Result	2017 Result
W18: Adoption of appropriate policies regarding managing waste arisings from all new development in City, Borough and District Councils DPDs	Adopted by all City, Borough and District Councils	Adopted by all City, Borough and District Councils	Adopted by all City, Borough and District Councils
W19: Development permitted within 250m of waste management facilities against County Council advice	None	One	One

Indicator analysis

4.61. The Waste Core Strategy is the Development Plan Document for waste planning in Worcestershire and should be read alongside the City, Borough and District Councils' Local Plans. However, there is a need to ensure that other Development Plan Documents do not inadvertently contradict the requirements of the Waste Core Strategy, and to ensure that they encourage sustainable waste management solutions to be embedded within non-waste management development.

4.62. There were 3 DPDs adopted within the monitoring period relevant to indicator W18: Adoption of appropriate policies regarding managing waste arisings from all new development in City, Borough and District Councils' Development Plan Documents. These were: The South Worcestershire Development Plan (adopted 2016), Bromsgrove District Plan (adopted 2017), and the Borough of Redditch Local Plan (adopted 2017). All these DPDs include appropriate policies regarding managing waste arisings. Therefore, **indicator W18: Adoption of appropriate policies regarding managing waste arisings from all new development in City, Borough and District Councils' Development Plan Documents** has met its target. In addition, the Council formally commented on waste matters during the preparation of the Preferred Options Consultation on the Wyre Forest Local Plan review in July 2017. There were no other development plans in Worcestershire being consulted on in this monitoring period.

4.63. During the 2013-14 monitoring period the Council commented on an application for a 400 berth marina in Stourport-on-Severn (Wyre Forest District Council application reference 13/0553/EIA). The applicant identified that the proposed development site is less than 250m from a waste management facility (OSS Oil Recovery Depot) and as such Policy WCS 16 was considered relevant to this application. The County Council recommended that the applicant should provide an assessment of the implications of the proximity of the application to the existing OSS site to demonstrate that the proposed development would not be unacceptably adversely affected by bio aerosols or other emissions from the waste management operation, and without this the District Council would be expected to refuse permission on the grounds that it would compromise the achievement of the Waste Core Strategy. This application was approved on the 16th March 2016 subject to a Section 106 agreement. This agreement

was formalised in March 2019, thus giving the development permission. The determination of this application went against WCC advice. However, it was not deemed appropriate to take any further action about this case at this time due to the length of time between the determination of the application at planning committee and the section 106 agreement being formalised, and the fact that members of the planning committee have changed since the consideration of this application.

4.64. In 2017 the Council commented on an application for a Crematorium in Fladbury (Wychavon application reference 17/00511/FUL). This application was located less than 250m from a waste management facility (Spring Hill Farm) and as such Policy WCS 16 was considered relevant to this application. The County Council recommended that the developer should give serious consideration to whether there may be impacts from emissions (such as odours or fumes) from the normal operation of the waste management site on the operation of the proposed development or on the future occupants or staff of the proposed development to demonstrate that the proposed development would not be unacceptably adversely affected by bioaerosols or other emissions from the waste management operation, and without this the District Council would be expected to refuse permission on the grounds that it would compromise the achievement of the Waste Core Strategy. Despite this, this application was approved.

4.65. Therefore, **indicator W19** has failed to meet its target. In response to this, discussions have been undertaken with Wychavon District Council and light-touch training implemented to ensure decision makers are giving weight to the Waste Core Strategy as part of their decisions. Therefore, WCC will provide further formal training with colleagues from Worcestershire's Borough, City and Borough Councils, this will be scheduled once COVID-19 restrictions are lifted.

Conclusion

4.66. Two developments ware permitted within 250m of waste management facilities against County Council advice. Discussions have been undertaken with Wychavon District Council and light-touch training implemented to ensure decision makers are giving weight to the Waste Core Strategy as part of their decisions. Further training will be provided for all Worcestershire's district, city and borough councils in relation to waste safeguarding matters in the future.

4.67. There were no relevant DPDs adopted in this monitoring period which did not include relevant policies on managing waste arisings. Therefore, no action is required at this time.

4.68. Therefore, it has been determined that this objective is being delivered.

WO5: Enabling equivalent self-sufficiency in waste management in the County by addressing the "Capacity Gap" over the life of the strategy to 2027 and safeguarding existing waste management facilities from incompatible development.

Summary of indicators in this section

Table 10. Summary of objective 5 indicator performance

Indicator	Target	2016 Result	2017 Result
W19: Development permitted within 250m of waste management facilities against County Council advice.	None	One	One
W20: Progress towards equivalent self-sufficiency in re-use and recycling capacity based on headline delivery milestones in table 5 and Policy WCS 2.	Achievement of headline delivery milestones as set out in Policy WCS2	Achieved	Achieved
W21: Progress towards equivalent self-sufficiency in 'other recovery' capacity, based on headline delivery milestones in table 5 and Policy WCS 2.	Achievement of headline delivery milestones as set out in Policy WCS2	Achieved	Achieved
W22: Maintain equivalent self-sufficiency in sorting and transfer capacity.	No capacity gap for sorting and transfer	Achieved	Achieved
W23a: Maintain equivalent self-sufficiency in disposal and landfill capacity for non-inert waste.	No capacity gap for disposal and landfill	Achieved	Achieved
W23b: Maintain equivalent self-sufficiency in disposal and landfill capacity for inert waste.	No capacity gap for disposal and landfill	Achieved	Below Target
W23c: Maintain equivalent self-sufficiency in disposal and landfill capacity for hazardous waste.	No capacity gap for disposal and landfill	Achieved	Achieved
W24: Applications for Waste Management development determined within 13 weeks.	100%	100%	100%
W25a: Proportion of waste management applications discussed with Worcestershire County Council at pre-application stage.	Increase	Increase	Increase
W25b: Number of waste management proposals discussed	Increase	Increase	Decrease

Indicator	Target	2016 Result	2017 Result
with Worcestershire County Council at pre-application stage.			

Indicator analysis

Indicator W19: Development permitted within 250m of waste management facilities against County Council advice

4.69. During the 2013-14 monitoring period the Council commented on an application for a 400 berth marina in Stourport-on-Severn (Wyre Forest District Council application reference 13/0553/EIA). The applicant identified that the proposed development site is less than 250m from a waste management facility (OSS Oil Recovery Depot) and as such Policy WCS 16 was considered relevant to this application. The County Council recommended that the applicant should provide an assessment of the implications of the proximity of the application to the existing OSS site to demonstrate that the proposed development would not be unacceptably adversely affected by bio aerosols or other emissions from the waste management operation, and without this the District Council would be expected to refuse permission on the grounds that it would compromise the achievement of the Waste Core Strategy. This application was approved on the 16th March 2016 subject to a Section 106 agreement. This agreement was formalised in March 2019, thus giving the development permission. The determination of this application went against WCC advice. However, it was not deemed appropriate to take any further action about this case at this time due to the length of time between the determination of the application at planning committee and the section 106 agreement being formalised, and the fact that members of the planning committee have changed since the consideration of this application.

4.70. In 2017 the Council commented on an application for a Crematorium in Fladbury (Wychavon application reference 17/00511/FUL). This application was located less than 250m from a waste management facility (Spring Hill Farm) and as such Policy WCS 16 was considered relevant to this application. The County Council recommended that the developer should give serious consideration to whether there may be impacts from emissions (such as odours or fumes) from the normal operation of the waste management site on the operation of the proposed development or on the future occupants or staff of the proposed development to demonstrate that the proposed development would not be unacceptably adversely affected by bioaerosols or other emissions from the waste management operation, and without this the District Council would be expected to refuse permission on the grounds that it would compromise the achievement of the Waste Core Strategy. Despite this, this application was approved.

4.71. Therefore, indicator W19 has failed to meet its target. In response to this, discussions have been undertaken with Wychavon District Council and light-touch training implemented to ensure decision makers are giving weight to the Waste Core Strategy as part of their decisions. Therefore, WCC will provide further formal training with colleagues from Worcestershire's Borough, City and Borough Councils, this will be scheduled once COVID-19 restrictions are lifted.

Indicator W24: Applications for waste management development determined within 13 weeks

4.72. Indicator W24 shows good performance, with 100% of applications for waste management development determined within 13 weeks (16 weeks for EIA development), or within an agreed extension of time in both 2016 and 2017.

Indicator W25a: Proportion of waste management applications discussed with Worcestershire County Council at pre-application stage

4.73. Six of the seven waste applications (86%) determined in 2016 had pre-application discussion. This was an increase from 67% of applications (4 of 6 waste applications determined) in 2015. In 2017, this increased to 100% (2 applications) therefore indicator W25a: Proportion of applications discussed with Worcestershire County Council at pre-application stage has met its target.

Indicator W25b: Number of waste management proposals discussed with Worcestershire County Council at pre-application stage

4.74. During 2016, 28 proposals for waste management were discussed with WCC at pre-application stage, with 20 proposals discussed in 2017. Although this is a comparable to the 21 proposals discussed in the 2015 monitoring period, due to the decrease between 2016 and 2017 **indicator W25b: Number of proposals discussed with Worcestershire County Council at pre-application stage** has failed to meet its target.

4.75. WCC actively encourages applicants to engage in pre-application discussion, but as set out in NPPF paragraph 189, LPAs "cannot require that a developer engages with them before submitting a planning application, but they should encourage take-up of any pre-application services they do offer." The total number of pre-application discussions is also likely to reflect wider economic factors which determine how much development is taking place and whether businesses are looking to expand or new businesses to be established.

4.76. To encourage the take-up of pre application advice, the County Council always offers the opportunity for pre-application advice for potential applicants. Pre-application advice is included in the SCI (updated February 2015) which provides details on the service available and further promotes the service. No further action has been identified which would help improve the performance of this indicator.

Progress towards equivalent self-sufficiency (Indicators W20, W21, W22, and W23)

4.77. One of the objectives of the Waste Core Strategy (WCS) is to achieve equivalent self-sufficiency in waste management.[19] This means delivering waste management capacity that is equal to the amount of waste produced (waste arisings) in the county while recognising that cross-boundary movements are a normal part of the waste management industry.

Data limitations

Waste arisings

4.78. There is data available for LACW and hazardous waste arisings in Worcestershire but no robust data on C&I or C&D arisings in Worcestershire. However,

[19] Equivalent self-sufficiency means Worcestershire's capacity to manage the amount of waste that arises in the county, while taking into account both imports and exports in recognition that cross-boundary movements are inevitable.

the Waste Core Strategy includes projections of waste arisings based on modelling undertaken at a regional level. The Council was in discussion with the West Midlands Resource Technical Advisory Body for Waste about updating projections of waste arisings during 2016 and 2017, leading to the guidance being adopted in 2019. However, the Waste Core Strategy projections were subject to examination in public and will be used to monitor the capacity gap until better information is available.

Waste management capacity

4.79. There is no single measure of waste management capacity, but capacity is often considered as either:

- Actual capacity: This is the throughput of operational facilities with both valid planning permissions and waste management licences, permits or exemptions and refers to the actual quantity of waste which the facility manages.
- Notional capacity: This is the potential throughput which could be achieved if operations were to work to the maximum levels permitted in their planning permission or waste management licence or permit or exemption.

4.80. The Waste Core Strategy considered actual capacity rather than notional capacity as notional capacity is often skewed by different classifications within the various waste regulatory regimes rather than reflecting practical constraints on a site. There are however limitations in using actual capacity throughputs as these vary on an annual basis based on the market and other commercial factors and may not always reflect the throughput a site is capable of managing. To address some of these issues the Waste Core Strategy calculated capacity using the highest throughput figure for each waste management site from either the previous 5 years of data taken from the WDI, or the throughput as recorded in the 2009 Waste Sites Survey conducted by Worcestershire County Council. The Waste Sites Survey is used in addition to the WDI to capture sites that have an exemption from the Environmental Permitting regime20 which would mean the sites is not recorded in the WDI.

4.81. There are also limitations to this approach. The data held in the Waste Sites Survey is dated. The Council sought to update this information by conducting a new survey in 2017. Unfortunately, despite emails, letters, and follow-up phone calls, only 24 of 117 waste management companies in the county responded to the survey. The Council does not have the authority to compel companies to provide the information requested. Therefore, as it is estimated that a significant proportion of Worcestershire's waste management capacity is at sites with exemptions, it is still considered important to include the data from the 2009 survey in the calculations. Further consideration will be given to whether other methods could be more successful in refreshing the survey in future.

4.82. Limitations with the WDI are outlined in paragraphs 4.28-4.30 above. In addition, significant reductions in capacity may be masked until the higher throughput figures for a site are outside the 5-year window used to calculate overall capacity.

4.83. However, the AMR continues to use this method as it was tested through the independent examination of the adopted Waste Core Strategy. Sites known to have ceased operation and to have been redeveloped for an alternative land use have also

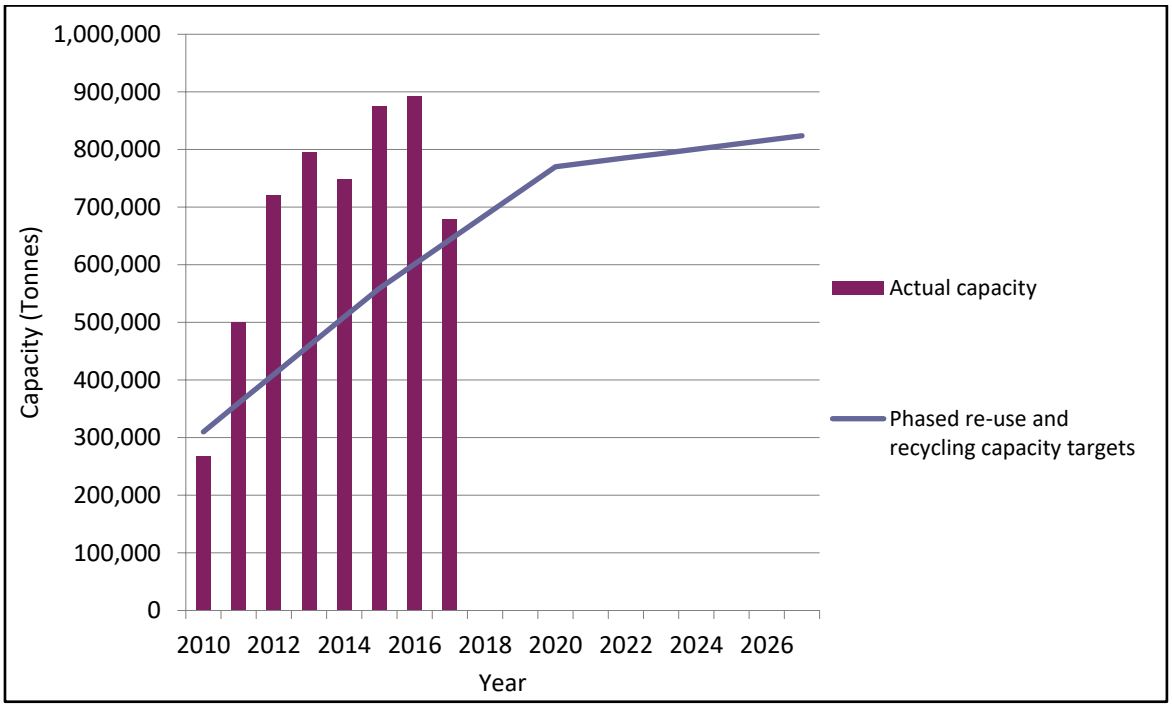
[20] A waste exemption is a waste operation that is exempt from needing an environmental permit. Each exemption has specific limits and conditions that the holder must operate within. Exemptions must be registered with the Environment Agency and each registration lasts 3 years. https://www.gov.uk/government/collections/waste-exemptions-treating-waste

been excluded from the capacity data. The capacity for re-use and recycling, other recovery, and sorting and transfer in Worcestershire is shown in Figure 8.

W20: Progress towards equivalent self-sufficiency in re-use and recycling capacity based on headline delivery milestones in Table 5 and Policy WCS2

4.84. The Waste Core Strategy set out a phased approach to achieving equivalent self-sufficiency by 2020 and maintaining equivalent self-sufficiency beyond that point. This was based on projected waste arisings. Policy WCS2 sets out minimum milestones for re-use and recycling and identifies the "remaining" capacity requirement which should be met through a combination of re-use and recycling and other recovery capacity. The phased capacity targets, and progress in delivering re-use and recycling capacity, are shown in **Error! Reference source not found.**.

Figure 8. Re-use and recycling capacity.



2016

4.85. There was a 2% increase in re-use and recycling capacity between 2015 and 2016. This increase was largely due to an increase in capacity at physical treatment sites of approximately 15,000 tpa.

4.86. The targets in **indicator W20** continued to be met.

2017

4.87. There was a 24% decrease in re-use and recycling capacity between 2016 and 2017. This is largely due to a 54% decrease in capacity at metal recycling sites and end of life vehicles facilities. The majority of this loss is due to a single loss of 242,500 tpa capacity at Long Marston Metal Recycling Centre. This is due to the 5-year period no longer including data before a fire which led to a dramatic loss of capacity at this site.

4.88. There was an 8% increase in physical treatment capacity, and a 2% increase in biological treatment capacity between 2016 and 2017.

4.89. Despite the overall reduction in capacity, the targets in indicator W20 continued to be met and the milestones for delivery in 2017 set out in policy WCS 2 were achieved.

Conclusion

4.90. Re-use and recycling capacity shows good performance across both years, therefore the target set out in **indicator W20: Progress towards equivalent self-sufficiency in re-use and recycling capacity based on headline delivery milestones in Table 5 and Policy WCS2** has been met.

W21: Progress towards equivalent self-sufficiency in other recovery capacity based on headline delivery milestones in Table 5 and Policy WCS2

Limitations

4.91. There is an inconsistency between policy WCS2 which sets out minimum milestones for re-use and recycling and identifies the "remaining" capacity requirement which should be met through a combination of re-use and recycling and other recovery capacity and indicator W21 which implies a minimum level of capacity from other recovery facilities. It is the intention of the WCS to deliver waste management capacity at the highest level of the waste management hierarchy in line with the Waste Framework Directive therefore this section will consider other recovery capacity in its analysis but will also take account of re-use and recycling capacity in determining whether indicator W21 is being achieved.

Other Recovery Capacity

4.92. The Waste Core Strategy identifies a capacity gap for other recovery. However, until the opening of EnviRecover Energy from Waste site in 2017 all other recovery capacity was for "construction related activity" or recovery through "disposal of waste to land". As this capacity will get "used up" in a similar way to landfill void space it is not appropriate to include this form of other recovery capacity in calculations of long-term capacity provision (i.e. tonnes per annum). Therefore, these throughputs are shown for reference separately in Table 5.

Table 11. other recovery throughput.

	2013	2014	2015	2016	2017
Type of recovery: Construction	22,600	2,400	8,900	0	0
Type of recovery: Deposit of waste to land	100,900	0	148,600	89,100	0

4.93. In 2017, the EnviRecover site had a throughput of 201,000 tonnes. This is in excess of the phased target for 2017, showing good progress towards the delivery of the 2020 milestone of 276000 tonnes per annum.

Conclusion

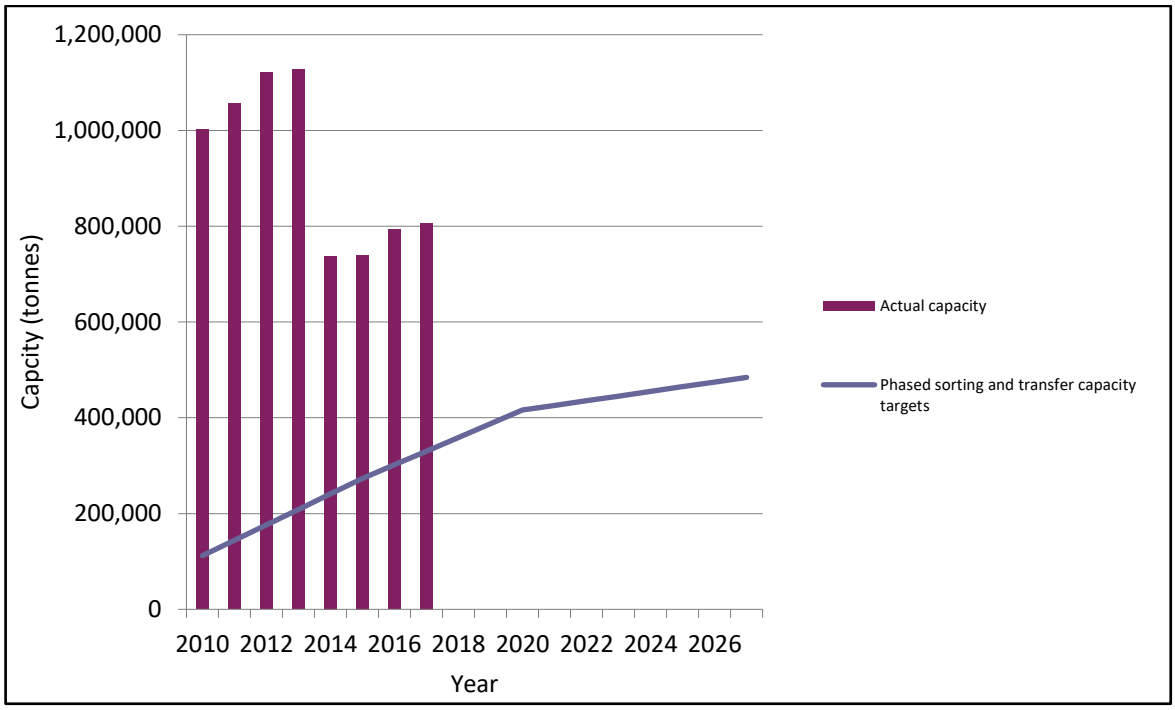
4.94. The phased delivery requirements for both re-use and recycling and for re-use, recycling and other recovery have been met by re-use and recycling capacity between

2013 and 2017 (see above). Therefore, indicator W21 has been met. In addition, a planning application was received in 2018 for an increase in throughput at the EnviRecover Energy from Waste facility from 200,000tpa to 230,000tpa.

W22: Maintain equivalent self-sufficiency in sorting and transfer capacity

4.95. Sorting and transfer capacity includes capacity at household waste sites (HWS), waste transfer stations (WTS) and materials reclamation facilities (MRF). These are facilities where waste is collected and bulked, or sorted for re-use, recycling, recovery or disposal but where no actual treatment takes place. The Waste Core Strategy identifies the need for waste transfer capacity as being one third of projected waste arisings.

Figure 9. Sorting and Transfer capacity.



<u>2016</u>

4.96. Sorting and transfer capacity increased by 7% and continued to exceed total projected sorting and transfer requirements, meeting the targets in **indicator W22**.

4.97. There was a 22% reduction in capacity at household waste sites (HWS). This is a significant reduction, however there have been no clear operational changes, such as reduced opening hours, site remodelling or changes in plant that are likely to account for this pattern of reduction across all of these sites. It is therefore likely that the reduced capacity figures are due to an acknowledged limitation in the method for calculating capacity, which is based on the highest throughput in the last 5 years (see paragraph 4.82 above). In addition, closer examination of the data and cross referencing with LACW waste returns shows significant discrepancies between throughput figure in the waste data interrogator data set and other data sources. This will be investigated further with Defra and updated in subsequent AMRs if appropriate.

4.98. On the other hand, capacity at waste transfer stations (WTS) and material recovery facilities (MRF) increased by 12%. This included increases to capacity at 9 sites, and two new sites opening in the county, whilst just 3 sites lost a small proportion of their capacity.

4.99. The targets in **indicator W22** were met, with sorting and transfer capacity remaining stable and continuing to exceed total projected sorting and transfer requirements.

2017

4.100. The targets in **indicator W22** were met with sorting and transfer capacity remaining stable and continuing to exceed total projected sorting and transfer requirements. There was a small increase of 1.7% to the overall capacity of HWS or MRF and WTS facilities.

Conclusion

4.101. Although sorting and transfer capacity has decreased between 2012 and 2017, it has remained above total projected sorting and transfer requirements and continued to exceed the targets and milestones for **indicator W22: Maintain equivalent self-sufficiency in sorting and transfer capacity**. The apparent reduction in capacity is due in part to the method used, which discounts peak 2009 throughput as in indicator of capacity from 2014 onwards. Despite issues with the method this it is still considered to be the best approach available. It is therefore not considered that any action is required to alter the monitoring methods at this time.

Indicator W23: Maintain equivalent self-sufficiency in disposal and landfill capacity.

4.102. Indicator W23 measures whether equivalent self-sufficiency in disposal and landfill capacity is being maintained. Within this section:

- W23a monitors landfill capacity for non-inert waste
- W23b monitors landfill capacity for inert waste21
- W23c monitors landfill and disposal capacity for hazardous waste

4.103. There was no disposal capacity for non-inert or inert waste in Worcestershire in 2016 and 2017, therefore W23a and W23b concentrate on landfill capacity. W23c takes account of the landfill and disposal capacity for hazardous waste.

4.104. Landfill capacity is set out in the Environment Agency's waste management for England data tables, which provide information on landfill void space annually. In some cases, void space increases or decreases at a different rate than the amount of waste deposited. This is not uncommon and results from re-assessments of void space by the Environment Agency, the creation of new cells at existing sites, or by a void increasing as mineral workings which have planning permission to be restored by landfilling are excavated.

[21] Waste that does not undergo any significant physical, chemical or biological transformations. Inert waste will not dissolve, burn or otherwise physically or chemically react, biodegrade or adversely affect other matter with which it comes into contact in a way likely to give rise to environmental pollution or harm human health. The total leachability and pollutant content of the waste and the ecotoxicity of the leachate must be insignificant, and in particular not endanger the quality of surface water and/or groundwater

Data Limitations

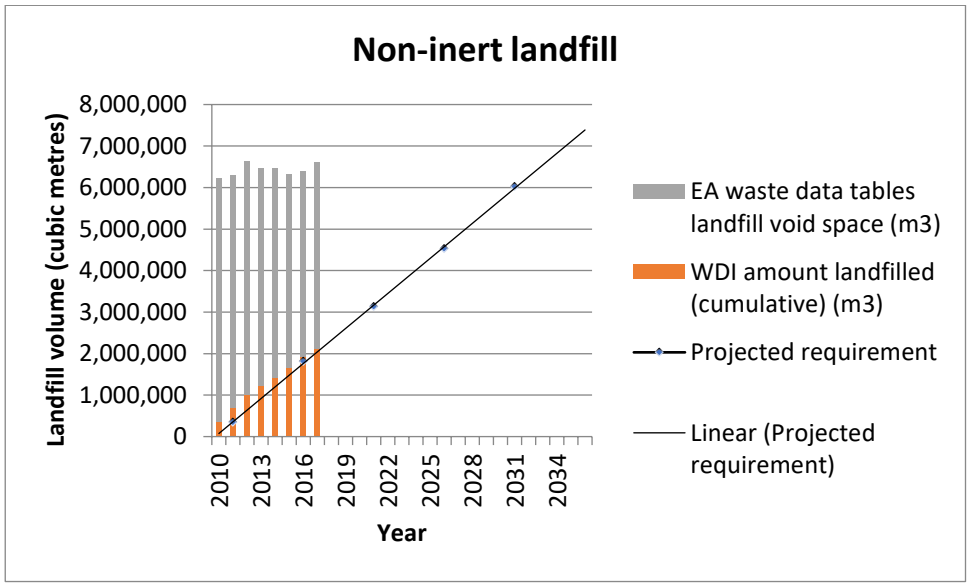
4.105. Due to the issues identified in paragraph 4.30 relating to incomplete landfill data in the Waste Data Interrogator in 2009, 2013 and 2014, the cumulative landfill totals used in the analysis of this indicator will be underestimates of the total amount landfilled.

4.106. Discussion of how to rectify these issues has been undertaken with the Environment Agency. It is understood that the Environment Agency is currently performing an internal assessment of its datasets, including limitations of different datasets and differences between them, to ascertain whether changes could be made to the datasets so that they are fit for purpose, display comparable data, and to ensure accurate analysis can be undertaken. However, as of the release of the 2017 data, no changes have been made. The Environment Agency's advice at this time continues to be that their datasets offer an opportunity to see indicative trends within the data and should not be relied upon for detailed analysis. This situation will continue to be monitored, with ongoing engagement with the Environment Agency as appropriate.

W23a: Maintain equivalent self-sufficiency in disposal and landfill capacity for non-inert waste

4.107. Figure 10 shows the projected landfill requirement as set out in the Waste Core Strategy, the cumulative amount of non-inert landfill in Worcestershire since 2010 (baseline year for this data set) and the landfill void space as reported in the EA waste data tables.

Figure 10. Non-inert landfill, amount landfilled and void space.

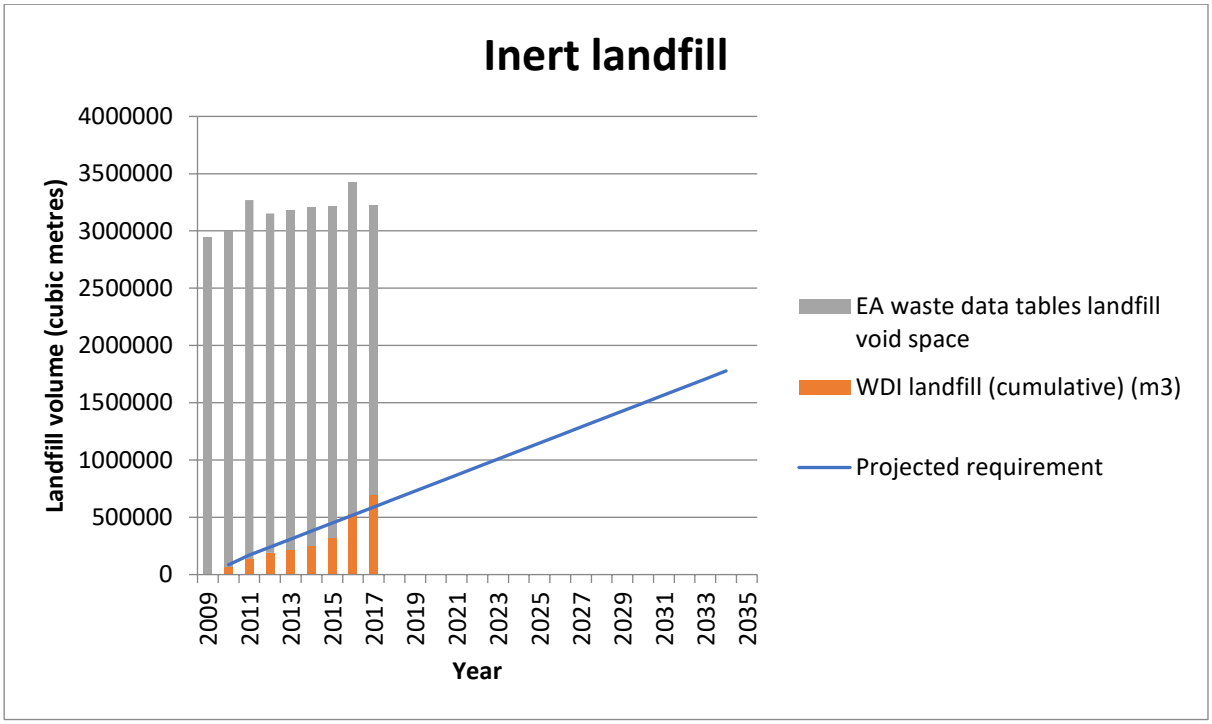


4.108. The amount of non-inert waste landfilled in Worcestershire was 268,405 tonnes in 2016 and 171,797 tonnes in 2017 across two sites, leading to a cumulative 2,100,748 tonnes of non-inert waste landfilled in the county since 2009. This is 10% below the projections made in the Waste Core Strategy. This means that there is more non-inert landfill capacity remaining at this stage in the Waste Core Strategy than was projected.

4.109. As void space is in line with the projected void space for both 2016 and 2017 as set out in the Waste Core Strategy, **indicator W23a** has met its target in this monitoring year.

W23b: Maintain equivalent self-sufficiency in disposal and landfill capacity for inert waste

Figure 11. Inert landfill, amount landfilled and void space.



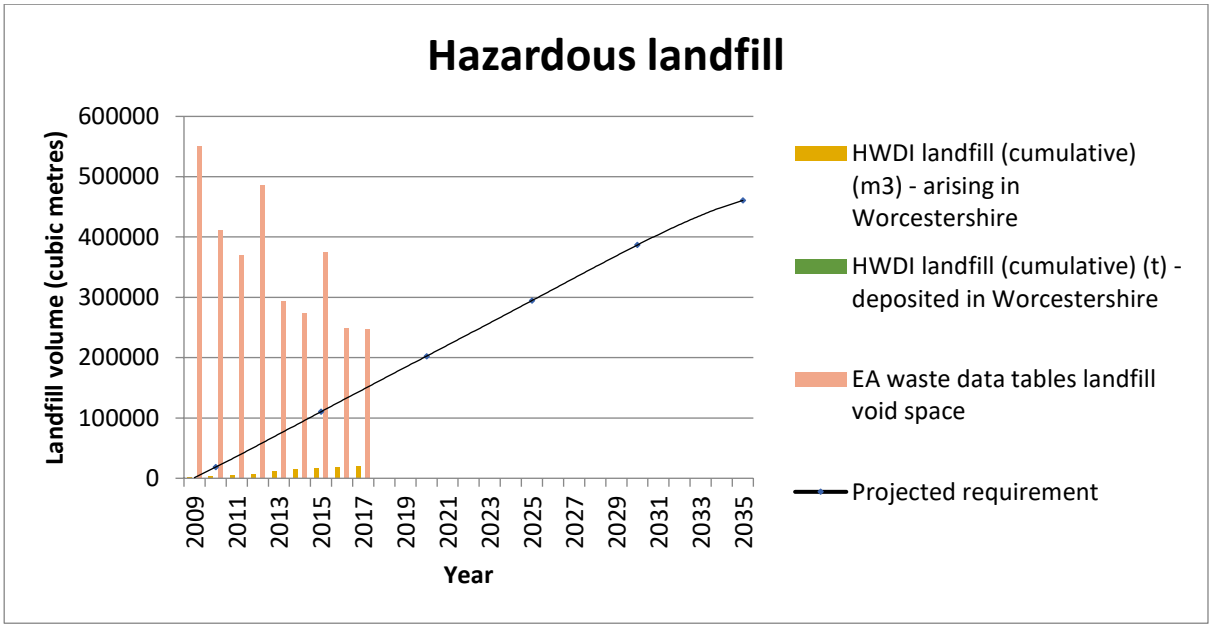
4.110. The amount of inert waste landfilled in Worcestershire was 317,686 tonnes in 2016 and 246,990 tonnes in 2017, across 5 sites, leading to a cumulative total of 1,045,677 tonnes of inert waste landfilled in the county since 2009. This is approximately 18% above the projections made in the Waste Core Strategy. This means that there is less inert landfill capacity remaining at this stage in the Waste Core Strategy than was projected. However, the amount of inert waste landfilled in 2016 is three times the previous greatest amount[22] of inert waste landfilled since 2010, with 2017 landfill rates falling by 30% compared the 2016.

4.111. Therefore, **indicator W23b** has failed to meet its target in the 2017 monitoring year. The situation will be monitored to analyse whether the increased landfill rates in these years is indicative of a long-term trend towards the landfilling of inert waste, or if landfill rates fall back to previous levels in future years in line with the projected requirement.

[22] 108,600 tonnes in 2011

W23c: Maintain equivalent self-sufficiency in disposal and landfill capacity for hazardous waste

Figure 12. Hazardous landfill and void space.



4.112. There are no dedicated hazardous landfill sites in Worcestershire. However, there is one landfill site which has an environmental permit allowing it to receive Stable Non-Reactive Hazardous Wastes (SNRHW)[23]. The Environment Agency's waste data tables show the county's void space for "non-hazardous with SNRHW (Stable Non-Reactive Hazardous Wastes) cell", but this capacity is for both hazardous and non-hazardous wastes. Therefore, the full void space is therefore unlikely to be available for hazardous waste, and the Waste Core Strategy assumes that half of the void space might be available for hazardous waste. This assumption has been tested at examination and remains the basis for the analysis in the AMR. Therefore, the landfill void space displayed in Figure 12 is half that recorded in the Environment Agency waste data tables.

4.113. The HWDI provides data on the actual levels of hazardous waste arising in Worcestershire, and how much of this was disposed of to landfill both within and out of the county. Just 1.2 tonnes of hazardous waste were landfilled within the county in 2016, with none landfilled in 2017, leading to a cumulative total of 104.2 tonnes since 2009. The amount of hazardous waste arising in Worcestershire which was disposed of to landfill anywhere in the country in 2017 was 1758.2 tonnes,[24] leading to a cumulative total of 20,420 tonnes since 2009. This is approximately 85% below the projections made in the Waste Core Strategy.

[23] Defined as hazardous waste for which the leaching behaviour will not change adversely in the long-term, under landfill design conditions or foreseeable accidents: in the waste alone (for example, by biodegradation); under the impact of long-term ambient conditions (for example, water, air, temperature or mechanical constraints); or by the impact of other wastes (including waste products such as leachate and gas).

[24] 1922.8 tonnes in 2016

4.114. Void space[25] within Worcestershire has decreased in this monitoring year compared to 2015, continuing the overall trend since 2009. However, there was only a minimal change in void space between 2016 and 2017. When considered against the low levels of hazardous waste being disposed of to landfill, the void space still appears to be sufficient for the life of the Waste Core Strategy.

4.115. In addition to landfill in 2016, 6549 tonnes of hazardous waste was managed by disposal within Worcestershire. 1077 tonnes of this was hazardous waste that arose in Worcestershire, with the rest imported from other areas. A further 343 tonnes of hazardous waste which arose in Worcestershire was exported and deposited at specialist facilities elsewhere in the country.

4.116. In 2017, 6181 tonnes of hazardous waste was managed by disposal within Worcestershire. 1085 tonnes of this was hazardous waste that arose in Worcestershire, with the rest imported from other areas. A further 445 tonnes of hazardous waste which arose in Worcestershire was exported and disposed of at specialist facilities elsewhere in the country.

4.117. The amount of hazardous waste landfilled and disposed of in the county far exceeds the amount of hazardous waste arising in Worcestershire. Therefore, **indicator W23c** has met its target in this monitoring year.

Conclusion

4.118. Good progress has been made towards equivalent self-sufficiency in re-use and recycling capacity, and "other recovery" capacity, based on headline delivery milestones set out in table 5 and Policy WCS 2.

4.119. Two developments ware permitted within 250m of waste management facilities against County Council advice. Discussions have been undertaken with Wychavon District Council and light-touch training implemented to ensure decision makers are giving weight to the Waste Core Strategy as part of their decisions. Further training will be provided for all Worcestershire's district, city and borough councils in relation to waste safeguarding matters in the future.

4.120. Although the total number of proposals undertaking pre-application advice fell in 2017, the percentage of the planning applications received which had undertaken pre-application advice increased in 2017.

4.121. No capacity gap has been identified for sorting and transfer capacity for any waste stream. No capacity gap has been identified for landfill and/or disposal for any waste stream. Non-inert and inert landfill rates are broadly in line with predictions. No action is required in these areas. For hazardous landfill, the rate of hazardous waste arisings being deposited in landfill (within or beyond the county) is significantly lower than predicted.

4.122. Therefore, it has been determined that this objective is being delivered.

[25] Environment Agency Waste Data Tables "non-hazardous with SNRHW (Stabilised Non-Reactive Hazardous Waste) cells". The Waste Core Strategy assumed that that half the "non-hazardous with SNRHW cells" void space might be available for hazardous waste.

WO6: Involving all those affected as openly and effectively as possible.

Summary of indicators in this section

Table 12. Summary of objective 6 indicator performance

Indicator	Target	2016 Result	2017 Result
W26: Permitted applications for waste management which include a consultation statement	100%	12.5%	0%
W27: Decisions where there are no policies in the Development Plan which are relevant to the application or relevant policies are out of date at the time of making the decision	None	None	None

Indicator analysis

4.123. There were no decisions where there were no relevant policies in the development plan, or where policies were absent or out of date, in this monitoring period. Therefore, the target for **indicator W27: Decisions where there are no policies in the Development Plan** which are relevant to the application or relevant policies are out of date at the time of making the decision has been met.

4.124. Just 1 of 8 applications (12.5%) approved in 2016, and no applications (0%) approved in 2017, included a consultation statement[26], **therefore indicator W26: Permitted applications for waste management which include a consultation statement** failed to meet its target. This has been highlighted in previous AMRs, with action taken in the form of the adoption of the Validation Document alongside the Waste Core Strategy as a mechanism intended to support the delivery of this objective. Therefore, it is not considered this is a failure of the Waste Core Strategy which requires modifications to policies to rectify.

4.125. No further action is required at this time.

Conclusion

4.126. The Development Plan included relevant policies to make decisions on all planning applications submitted during the monitoring period and as such the target of no decisions being made where there are no policies in the Development Plan which are relevant to the application, as set out in **indicator W27** was met. In addition, there were also no cases where policies were considered to be out of date, or where the development plan was silent on substantive issues.

4.127. However, just 1 of 9 applications approved within this monitoring period included a consultation statement, therefore **indicator W26: Permitted applications for waste**

[26] The 2015 Validation Document states that "Applications must be supported by a statement setting out how the applicant has complied with the requirements for pre-application consultation set out in Worcestershire County Council's adopted SCI, demonstrating that the views of the local community have been sought and taken into account in the formulation of development proposals".

management which include a consultation statement failed to meet its target This has been highlighted in previous AMRs, with action taken in the form of the adoption of the Validation Document alongside the Waste Core Strategy as a mechanism intended to support the delivery of this objective. Therefore, it is not considered this is a failure of the Waste Core Strategy which requires modifications to policies to rectify.

4.128. Therefore, it has been determined that although there is a failure to deliver this objective, no actions are required at this time.

WO7: Developing a waste management industry that contributes positively to the local economy.

Summary of indicators in this section

Table 13. Summary of objective 7 indicator performance

Indicator	Target	2016 Result	2017 Result
W20: Progress towards equivalent self-sufficiency in re-use and recycling capacity based on headline delivery milestones in table 5 and Policy WCS 2.	Achievement of headline delivery milestones in Table 5 and Policy WCS 2.	Achieved	Achieved
W21: Progress towards equivalent self-sufficiency in 'other recovery' capacity, based on headline delivery milestones in table 5 and Policy WCS 2.	Achievement of headline delivery milestones in Table 5 and Policy WCS 2.	Achieved	Achieved
W22: Maintain equivalent self-sufficiency in sorting and transfer capacity.	No capacity gap for sorting and transfer	Achieved	Achieved
W23a: Maintain equivalent self-sufficiency in disposal and landfill capacity of non-inert waste.	No capacity gap for disposal and landfill	Achieved	Achieved
W23b: Maintain equivalent self-sufficiency in disposal and landfill capacity of inert waste.	No capacity gap for disposal and landfill	Achieved	Below target
W23c: Maintain equivalent self-sufficiency in disposal and landfill capacity of hazardous waste.	No capacity gap for disposal and landfill	Achieved	Achieved
W28: Increase in GVA in Worcestershire from Waste Management.	Increase	Increase	Decrease

Indicator analysis

4.129. Full analysis of indicators W20 to W23c can be found in chapter 4.6.

4.130. No capacity gap has been identified for sorting and transfer capacity for any waste stream in this monitoring year. Therefore, **indicator W22: Maintain equivalent self-sufficiency in sorting and transfer capacity** has been met.

4.131. Good progress has been made towards equivalent self-sufficiency in re-use and recycling capacity, based on headline delivery milestones set out in table 5 and Policy

WCS 2 with rates increasing by 2% in 2016 and a further 8% in 2017. The performance of re-use and recycling also means that progress towards equivalent self-sufficiency in re-use, recycling, and "other recovery" capacity, based on headline delivery milestones set out in table 5 and Policy WCS 2 has also been met in this monitoring year. Therefore the targets for **indicators W20: Progress towards equivalent self-sufficiency in re-use and recycling capacity based on headline delivery milestones in table 5 and Policy WCS 2** and **W21: Progress towards equivalent self-sufficiency in 'other recovery' capacity, based on headline delivery milestones in table 5 and Policy WCS 2** have been met.

4.132. No capacity gap has been identified for landfill and/or disposal for non-inert waste. Therefore, **indicator W23a: Maintain equivalent self-sufficiency in disposal and landfill capacity of non-inert waste** has met its target.

4.133. Non-inert and inert landfill rates were in line with or lower than predictions and remaining capacity sufficient for the life of the Waste Core Strategy in 2016. However, in 2017 an increase in landfill rates means that remaining landfill capacity is currently slightly below projections, however, should landfill rates return to previously seen levels in future years this situation will improve. Therefore, indicator W23b: Maintain equivalent self-sufficiency in disposal and landfill capacity of inert waste has failed to meet its target. This increase above the projected landfill rate will continue to be monitored in order to determine if this is a long-term trend or a one-year event.

4.134. For hazardous landfill, the rate of hazardous waste arisings being deposited in landfill (within or beyond the county) is significantly lower than predicted. Due to this, the target of **indicator W23c: Maintain equivalent self-sufficiency in disposal and landfill capacity of hazardous waste** has been met.

Gross Value Added (GVA) of the waste sector

4.135. Gross Value Added (GVA) is the measure of the value of goods and services produced in an area, industry or sector of an economy. In this case the value of the waste sector to the overall economic value of Worcestershire.

4.136. Please note that the Office for National Statistics (ONS) revises GVA figures each year as new data and information becomes available and as methods change. Due to this, data shown in table 14 for previous years may not match that reported in previous AMRs.

Table 14. Gross Value Added (GVA) of the waste sector

	2013	2014	2015	2016	2017[27]	% change (2013-2017)
Waste management[28] GVA (£m)	208	231	257	258	221	+6%
Worcestershire GVA (£m)	11,327	12,021	12,387	12,727	13,314	+18%
% contribution from waste management	1.8%	1.9%	2.1%	2.0%	1.7%	-0.1%

Source: Annual Business Inquiry/Business Register and Employment Survey

4.137. The GVA from waste management is only a small part of Worcestershire's GVA, standing at 1.7% in 2017. Actual GVA from waste management has decreased slightly in 2017 after increasing every year between 2010 and 2016. Overall there is a rise of 6% between 2013 and 2017. Despite a small decrease as a proportion of the total Worcestershire GVA in 2017 compared to 2016, reflecting faster growth in the wider Worcestershire economy, the waste sector continues to provide a steady and valuable contribution to the wider Worcestershire economy. Therefore, although indicator W28: Increase in GVA in Worcestershire from Waste Management has failed to meet its target in 2017, no action is required at this time.

Conclusion

4.138. Good progress has been made towards equivalent self-sufficiency in re-use and recycling capacity, and "other recovery" capacity, based on headline delivery milestones set out in table 5 and Policy WCS 2.

4.139. No capacity gap has been identified for sorting and transfer capacity for any waste stream, and no capacity gap has been identified for landfill and/or disposal for non-inert and hazardous waste. For hazardous landfill, the rate of hazardous waste arisings being deposited in landfill (within or beyond the county) is significantly lower than predicted.

4.140. Non-inert and inert landfill rates are in higher than predictions in 2017. This will be monitored to determine whether landfill rates return to the projected levels.

4.141. The contribution of waste management development to the GVA of Worcestershire shows good performance, despite a small reduction between 2016 and 2017 according to the provisional 2017 figures.

4.142. Therefore, it has been determined that this objective is being delivered.

[27] Estimates for 2017 are provisional.

[28] Due to a change in methodology, figures in this table may differ from previous years. The following sectors are included:

37: Sewerage

38: Waste collection, treatment and disposal activities; materials recovery

39: Remediation activities and other waste management services. This division includes the provision of remediation services, i.e. the clean-up of contaminated buildings and sites, soil, surface or ground water.

WO8: Directing development to the most appropriate locations in accordance with the spatial strategy.

Summary of indicators in this section

Table 15. Summary of objective 8 indicator performance

Indicator	Target	2016 Result	2017 Result
W29: Permitted 'other recovery' and disposal (excluding landfill) capacity at each level of the geographic hierarchy.	100% of new 'other recovery' and disposal (excluding landfill) capacity at level 1 and 2 of the geographic hierarchy.	0%	No relevant applications
W30: Permitted re-use, recycling, storage, sorting and transfer capacity at each level of the geographic hierarchy.	More than 50% of new re-use, recycling, storage, sorting and transfer capacity at level 1 and 2 of the geographic hierarchy.	75%	50%

Indicator analysis

4.143. In 2016, 1 application for new 'other recovery' or disposal (excluding landfill) capacity was approved in level 5 of the geographic hierarchy. This is the level of the geographic hierarchy containing the settlements that have the smallest role in managing the county's waste management needs. This application (16/000008/CM) was for an additional two digesters at an existing site. The officer's report to Planning Committee therefore considered that as this was at an existing site, this was not inappropriate to be permitted in this level of the geographic hierarchy. In 2017, there were no applications relevant to this indicator.

4.144. There were four permissions granted for re-use, recycling, storage, sorting, or transfer capacity in 2016. Of these, one application was located in level 5 of the geographic hierarchy. This application was for a variation of conditions to extend working hours at an existing site (Application 15/000017/CM). Therefore, the target for **indicator W30: Permitted re-use, recycling, storage, sorting and transfer capacity at each level of the geographic hierarchy** was met in 2016.

4.145. In 2017, 1 out of 2 permissions granted (50%) were at levels 1 or 2 of the geographic hierarchy. There was 1 permission granted for additional re-use, recycling, storage, sorting, or transfer capacity, located in level 3 of the hierarchy. This application was for an Incinerator Bottom Ash (IBA) processing and recovery facility at Hill and Moor Landfill Site, near Pershore. As the target is for more than 50% of new re-use, recycling, storage, sorting and transfer capacity to be at level 1 and 2 of the geographic hierarchy, the target for **indicator W30: Permitted re-use, recycling, storage, sorting and transfer capacity at each level of the geographic hierarchy** was not met in 2017. However, due to the nature of the wider site the application was contained within, the approval of this application at this level of the geographic hierarchy was considered by the officer's report to Planning Committee to be appropriate. This failure of **indicator W30** is therefore not considered to be a significant failure and no action is required at this time. The performance of this indicator will be monitored in future monitoring periods.

Conclusion

4.146. 0% of permitted re-use, recycling, storage, sorting and transfer capacity in 2017 was at level 1 or 2 of the geographic hierarchy, however due to the low number of applications, and the nature of the only application granted, the failure to meet this this target has been deemed not to be a significant failure. The performance of this indicator will be monitored in future monitoring periods and no action is required at this time.

4.147. In 2016, one application was determined for 'other recovery'. This was located in Level 5 of the geographic hierarchy. However, the applicant demonstrated that this was the most appropriate level for this development due to its location within an existing waste site. Therefore, this was considered to be appropriate. In 2017, no applications were determined relevant to this indicator.

Minerals indicators

Introduction

5.1. The adopted County of Hereford and Worcester Minerals Local Plan does not contain monitoring indicators. There is however a role for the AMR to monitor the supply of minerals and the decision-making process.

5.2. For aggregates, this is done through the Local Aggregates Assessment, which is set out in Annex 1. These indicators have no set targets.

5.3. For industrial minerals, these indicators contain no targets and the issues monitored by the indicators mirror the aims of aggregate minerals indicators.

5.4. In addition, indicators to monitor the impacts of permissions for all types of mineral development in the county have been included mirroring the indicators set out in the Waste Core Strategy where these have been deemed relevant to minerals development. The targets of these indicators are in line with the Waste Core Strategy.

5.5. It is the Council's intention to continue to monitor these indicators through the AMR until the new Minerals Local Plan is adopted, at which point the AMR will monitor the objectives and indicators set out in the new plan.

5.6. There were no applications for mineral development determined in 2017, therefore statistics relating to applications determined rely solely on 2016, except where explicitly stated.

Applications determined for minerals development

Summary of indicators in this section

Table 16. Summary of indicator performance looking at applications determined for minerals development

Indicator	Target	2016 Result	2017 Result
M1: Permissions for minerals development granted contrary to Environment Agency advice on flooding.	None	None	No applications
M2: Permissions for minerals development granted contrary to Environment Agency advice on water quality.	None	None	No applications
M3: Permissions for minerals development that include provision for energy efficiency.	100%	None	No applications
M4: Permissions having an unacceptable adverse impact on landscape character, scheduled ancient monuments, listed buildings, conservation areas, battlefields or registered historic parks and gardens.	None	None	No applications
M5: Permissions granted in the Malvern Hills or Cotswolds AONB.	No unacceptable adverse change in the quality or character of the landscape.	No unacceptable adverse impact.	No applications
M6: Permissions for minerals development take into account local characteristics.	No unacceptable adverse impact on local characteristics.	No unacceptable adverse impact.	No applications
M7: Permissions for minerals development that take into account amenity considerations.	No unacceptable adverse impact on amenity.	No unacceptable adverse impact.	No applications
M8: Permissions granted in accordance with highways advice.	100%	100%	No applications
M10: Applications for waste management/minerals development determined within 13 weeks (16 weeks for EIA development), or within an agreed extension of time.	100%	100%	No applications
M11a: Proportion of approved applications discussed with	Increase	100%	No applications

Indicator	Target	2016 Result	2017 Result
Worcestershire County Council at pre-application stage.			
M11b: Number of proposals discussed with Worcestershire County Council at pre-application stage	Increase	Increase	Increase
M19: Permitted applications for minerals development which include a Consultation Statement.	100%	66%	No applications
M20: Decisions where there are no policies in the Development Plan which are relevant to the application or relevant policies are out of date at the time of making the decision.	None	Two	No applications
M21: New mineral development in 'preferred areas'.	100% in Preferred Areas identified in the Adopted Hereford and Worcester Minerals Local Plan.	50% in Preferred Areas identified in the Adopted Hereford and Worcester Minerals Local Plan.	No applications

Indicator analysis

5.7. There were no permissions granted contrary to the targets of the following indicators:

- **M1: Permissions for minerals development granted contrary to Environment Agency advice on flooding.**
- **M2: Permissions for minerals development granted contrary to Environment Agency advice on water quality.**
- **M4: Permissions having an unacceptable adverse impact on landscape character, scheduled ancient monuments, listed buildings, conservation areas, battlefields or registered historic parks and gardens.**
- **M5: Permissions granted in the Malvern Hills or Cotswolds AONB.**
- **M6: Permissions for minerals development that take into account local characteristics.**
- **M7: Permissions for minerals development that take into account amenity considerations.**
- **M8: Permissions granted in accordance with highways advice.**
- **M10: Applications for waste management/minerals development determined within 13 weeks (16 weeks for EIA development), or within an agreed extension of time.**

Indicator M20: Decisions where there are no policies in the Development Plan which are relevant to the application or relevant policies are out of date at the time of making the decision.

5.8. There were two applications for minerals developments in 2016. However, much of the adopted 1997 Minerals Local Plan is out of date, with a small number of policies still in place. Therefore, **indicator M20** has failed to meet its target in 2016. This is being rectified through the development of the emerging Minerals Local Plan, which as of Spring 2020 is due to undergo Examination in Public.

5.9. There were no applications determined in 2017.

Indicator M3: Permissions for minerals development that include provision for energy efficiency.

5.10. In 2016, no permitted minerals sites included provision for energy efficiency. Therefore, **indicator M3: Permissions for minerals development that include provision for energy efficiency** has failed to meet its target. This is believed to be due to the reliance on national policy in the decision-making process due to the lack of locally specific policies. A new Minerals Local Plan is being prepared to address this which includes a policy requirement for energy efficiency to be considered in mineral developments.

Indicator M11a: Proportion of approved applications discussed with Worcestershire County Council at pre-application stage.

5.11. During the 2016 monitoring period 100% of applications (3/3) determined had previously undertaken pre application discussion with Worcestershire County Council. Therefore, **indicator M11a: Proportion of approved applications discussed with Worcestershire County Council at pre-application stage** met its target in the 2016 monitoring period. There were no minerals applications determined in 2017.

Indicator M11b: Number of proposals discussed with Worcestershire County Council at pre-application stage

5.12. During the 2016 monitoring period 8 proposals for minerals development were discussed with WCC at pre-application stage, this is an increase from 6 proposals discussed in the 2015 monitoring period. Therefore, **indicator M11b: Number of proposals discussed with Worcestershire County Council at pre-application stage** met its target in the 2016 monitoring period.

5.13. In the 2017 monitoring period 10 proposals for minerals development were discussed with WCC at pre-application stage. Therefore, indicator **M11b: Number of proposals discussed with Worcestershire County Council at pre-application stage** met its target in the 2017 monitoring period.

Indicator M19: Permitted applications for minerals development which include a Consultation Statement.

5.14. During the 2016 monitoring period 3 proposals for new minerals development were permitted. Two (66%) of these applications included a consultation statement. Therefore, **indicator M19: Permitted applications for minerals development which include a Consultation Statement** has failed to meet its target. This has been highlighted in previous AMRs, with action taken in the form of the adoption of the Validation Document alongside the Waste Core Strategy as a mechanism intended to

support the delivery of this objective. Therefore, it is not considered this is a failure of the Waste Core Strategy which requires modifications to policies to rectify.

5.15. There were no applications relevant to this indicator determined in 2017.

Indicator M21: New mineral development in 'preferred areas'

5.16. During the 2016 monitoring period 2 proposals for new minerals development were permitted. Only one of these applications were located within Preferred Areas identified in the Adopted Hereford and Worcester Minerals Local Plan. Therefore, **indicator M21: New mineral development in 'preferred areas'** has failed to meet its target. However, due to the limited extent of remaining Preferred Areas in the adopted Minerals Local Plan, this failure has been determined to be appropriate in order to ensure a steady and adequate supply of mineral resources. The emerging Minerals Local Plan will set out new locational policies relating to mineral working.

5.17. There were no applications relevant to this indicator determined in 2017.

Conclusion

5.18. The indicators in this section will continue to be monitored until the new Minerals Local Plan is sufficiently developed to replace these indicators. No other action is required at this time to improve performance.

Steady and adequate supply of aggregate mineral resources

Summary of indicators in this section

Table 17. Summary of indicator performance looking at steady and adequate supply of aggregate mineral resources

Indicator	Target	2016 Result	2017 Result
M9: Production of secondary and recycled aggregates.	Monitor baseline	No data	No data
M12a: Annual production of primary land won aggregates (Sand and Gravel).	Monitor baseline	0.399 million tonnes	0.455 million tonnes
M12b: Annual production of primary land won aggregates (Crushed Rock).	Monitor baseline	0 tonnes	0 tonnes
M13: Landbank of permitted sand and gravel reserves.	Minimum 7 years	6.99-7.07 years	6.06 years
M14: Landbank of permitted crushed rock reserves.	Minimum 10 years	0 years	0 years
M16: Sufficient productive capacity for sand and gravel supply.	Monitor baseline	6 sites	4 sites
M17: Sufficient productive capacity for crushed rock supply.	Monitor baseline	0 sites	0 sites

Indicator analysis

5.19. Full analysis of the steady and adequate supply of aggregate minerals is set out in the LAA (Annex 1). This section summarises key points raised in the LAA.

Indicator M9: Production of secondary and recycled aggregates

5.20. National policy states that, so far as practicable, planning authorities should "take account of the contribution that substitute or secondary and recycled materials and minerals waste would make to the supply of materials, before considering extraction of primary materials".29 Secondary aggregates is a term often used to describe mineral that is produced as a by-product of other mining or quarrying activities or as a by-product of an industrial process. There are currently no industrial processes in Worcestershire which are known to produce secondary aggregates. However, there is potential for some provision of secondary aggregates in the future. An Energy from Waste Plant at Hartlebury, near Kidderminster, commenced operation in 2017.[30] This plant is predicted to produce 40,000 tonnes per annum of incinerator bottom ash which may be capable of being used as secondary aggregate, although further processing would be required to enable this.

[29] Department for Communities and Local Government (February 2019) National Planning Policy Framework, paragraph 204

[30] Further information about the development of the Energy from Waste Plant can be viewed at http://www.severnwaste.com/recovery/envirecover-project/

5.21. An application for an Incinerator Bottom Ash Processing and Recovery Facility at Hill and Moor Landfill Site was granted in January 2017. This facility is tied to the life of the Hill and Moor Landfill Site and is limited to processing 50,000 tonnes per annum of incinerator bottom ash.

5.22. Recycled aggregates arise from several sources, notably construction and demolition waste (C&D waste) such as from the demolition of buildings, asphalt planings from road resurfacing, and railway track ballast. "Recycling" aggregates involves the processing of waste materials to remove unwanted or inappropriate material such as fines, wood, plastic and metal. It will usually include crushing and screening. The recycled aggregate is then re-used, usually for a less demanding application.

Sand and Gravel (Indicators M12a, M13 and M16)

5.23. In 2017, there were 4 sand and gravel sites in the County, of which 3 were "active" (in production for some time during the year) and 1 was "inactive" (worked in the past and contains permitted reserves). Annual production of sand and gravel in Worcestershire stood at 0.455 million tonnes. There are no targets currently set for **indicator M16: Sufficient productive capacity for sand and gravel supply** or **M12a: Annual production of primary land won aggregates (Sand and Gravel)**, however the LAA sets an annual production guideline of 0.572 million tonnes per annum.

5.24. The total permitted reserves for sand and gravel at 31st December 2017 was 3.465 million tonnes. Based on the production guideline set out in the most recent LAA (using data to 31st December 2017, see Annex 1) of 0.572 million tonnes per annum, Worcestershire had a landbank of 6.06 years at 31st December 2017. This is below the 7-year landbank required by national policy and therefore **indicator M13: Landbank of permitted sand and gravel reserves** has failed to meet its target.

5.25. A new Minerals Local Plan and Mineral Site Allocations Development Plan Document are being prepared to facilitate the steady and adequate supply of aggregates.

Crushed Rock (indicators M12b, M14 and M17)

5.26. In 2015, annual production of crushed rock in Worcestershire stood at 0 tonnes.

5.27. There were no sites with permitted reserves of crushed rock at 31st December 2017, and no planning applications for working crushed rock are pending decision. This means that Worcestershire has no permitted reserves, no productive capacity and no landbank for crushed rock. Therefore, **indicator M13: Landbank of permitted crushed rock reserves** has failed to meet its target. There are no targets currently set for **indicator M17: Sufficient productive capacity for crushed rock supply**.

5.28. However, there has been very limited market interest in working crushed rock in Worcestershire for many years. There is only a very small amount of crushed rock resource (61ha) in Worcestershire which is not constrained by significant viability, environmental or amenity criteria as assessed in Worcestershire County Council (November 2018) Worcestershire Minerals Local Plan Background Document: Analysis of Mineral Resources in Worcestershire, available at www.worcestershire.gov.uk/mineralsbackground.

5.29. The delivery constraints outlined above, the lack of interest in Worcestershire's resources shown by the minerals industry since the closure of Broadway quarry in 2010, and no sites for crushed rock have been proposed in response to any of the four "calls for sites" undertaken. This indicates that it is unlikely that Worcestershire will be

able to provide crushed rock for the foreseeable future. These constraints, and Worcestershire's ability to supply crushed rock, have been discussed with the West Midlands, East Midlands, South West and South Wales Aggregate Working Parties, and have influenced the spatial strategy and policies proposed in the emerging Minerals Local Plan.

Action

5.30. This issue will be addressed in the emerging Minerals Local Plan, including through the duty to cooperate discussion with the West Midlands Aggregate Working Party (AWP), other neighbouring AWPs and relevant Minerals Planning Authorities.

Conclusion

5.31. The baseline will continue to be monitored and a new Minerals Local Plan produced to secure the steady and adequate supply of aggregate minerals.

Steady and adequate supply of Industrial minerals

Summary of indicators in this section

Table 18. Summary of indicator performance looking at steady and adequate supply of industrial minerals.

Indicator	Target	2016 Result	2017 Result
M15: Landbank of permitted clay reserves.	Minimum 25 years	69 to 76 years[31]	68 to 75 years[32]
M18: Sufficient productive capacity for clay supply.	Monitor baseline	2 sites	2 sites
M23: Annual production of silica sand.	Monitor baseline	Unknown	Unknown
M24: Landbank of permitted silica sand reserves.	Monitor baseline	Unknown	Unknown
M25: Annual production of building stone.	Monitor baseline	0 tonnes	0 tonnes
M26: Landbank of permitted building stone reserves.	Monitor baseline	0 years	0 years

Indicator analysis

5.32. At present, clay and silica sand are the only industrial materials produced in the county.

[31] 69 years estimate based on correspondence with Weinerberger (02.12.2014) which stated 71 years at that point in time, and 76 years estimate based on sales average (Mineral Extract: Great Britain Reports 2002 – 2011) and Weinerberger estimate of permitted resource (02.12.2014), adjusted to reflect two years of working conducted since that dataset.

[32] 68 years estimate based on correspondence with Weinerberger (02.12.2014) which stated 71 years at that point in time, and 75 years estimate based on sales average (Mineral Extract: Great Britain Reports 2002 – 2011) and Weinerberger estimate of permitted resource (02.12.2014), adjusted to reflect two years of working conducted since that dataset.

Clay (Indicators M15 and M18)

5.33. Clay is worked in Worcestershire at two sites in Hartlebury, at New House Farm and Waresley quarries, with associated brickworks (both owned by Wienerberger). The county's stock of permitted reserves in 2014 was approximately 71 to 78 years based on past sales estimates.33 However, data for 2016 and 2017 is not available. Adjusting the 2014 data to reflect two fewer years of remaining reserves in 2016 and three fewer in 2017 still exceeds the minimum 25-year target, therefore **indicator M15: Landbank of permitted clay reserves** is meeting its target.

5.34. Despite clay being worked at two sites in the county, both these sites are owned by the same operator, raising concerns over security of productive capacity, although no targets are currently set for **indicator M18**.

Silica Sand (Indicators M23 and M24)

5.35. Two quarries currently produce very small volumes of silica sand as an ancillary activity to the working of aggregate sands. The 2014 Annual Minerals Raised Inquiry (AMRI) survey is the most recent dataset available which reports on silica sand production. In 2014 the production figure was withheld for confidentiality reasons and therefore indicators **M23** and **M24** cannot be monitored.

Building Stone (Indicators M25 and M26)

5.36. Building stone has not been produced since the closure of Fish Hill Quarry near Broadway (2010) when it was worked as ancillary to crushed rock. Due to this the annual production of building stone is 0 tonnes in this monitoring period, and the landbank of permitted building stone reserves is 0 years. There are currently no targets set for indicators **M25** and **M26**.

Conclusion

5.37. The baseline will continue to be monitored and a new Minerals Local Plan produced to secure the steady and adequate supply of industrial minerals.

Economic benefit of minerals development

Summary of indicators in this section

Table 19. Summary of indicator performance looking at the economic benefit of minerals development

Indicator	Target	2016 Result	2017 Result
M27: Increase in GVA in Worcestershire from minerals development	Monitor baseline	Increase	Increase

Indicator analysis

5.38. Gross Value Added (GVA) is the measure of the value of goods and services produced in an area, industry or sector of an economy; in this case the value of the minerals sector to the overall economic value of Worcestershire.

5.39. Please note that the Office for National Statistics (ONS) revises GVA figures each year as new data and information becomes available and as methods change. Due to this, data shown in table 20 for previous years may not match that reported in previous AMRs.

Table 20. Gross Value Added of the minerals sector

	2013	2014	2015	2016	2017[34]	% change (2013-2017)
Minerals development GVA (£m)[35]	7	11	6	10	11	+57%
Worcestershire GVA (£m)	11,327	12,021	12,387	12,727	13,314	+18%
% contribution from minerals	0.06%	0.09%	0.05%	0.08%	0.08%	+0.02%

Source: Annual Business Inquiry/Business Register and Employment Survey

5.40. The GVA from minerals development is only a small part of Worcestershire's GVA, standing at 0.08% in 2017. Actual GVA from minerals development has increased by 57% between 2013 and 2017 from 7 to 11 million pounds. The growth in the minerals sector has occurred faster than the overall growth of GVA in Worcestershire, which grew by 18% in the same timeframe. Because of this, the contribution the minerals sector makes towards the overall GVA for Worcestershire has increased from 0.06% in 2013 to 0.08% in 2017. No target has been set for **indicator M22**.

Conclusion

5.41. The baseline will continue to be monitored.

[34] Estimates for 2017 are provisional.

[35] Due to a change in methodology, figures in this table may differ from previous years. The estimates assume that output per worker in mining and quarrying is the same as output per worker for the production sector and as a result may under or overestimate GVA.

Appendix A: Waste Core Strategy data tables

Indicator	Objective	Target	2013	2014	2015	2016	2017
W1: Permissions for waste management development granted contrary to the EA advice on flooding.	WO1	0	0	0	0	0	0
W2: Permissions for waste management development granted contrary to the EA advice on water quality.	WO1	0	0	0	0	0	0
W3: Permissions for waste management development that include measures for energy efficiency.	WO1	100%	0%	0%	0%	0%	0%
W4: Permissions for waste management development with a gross floor space of over 1000m² to gain at least 10% of energy supply annually from renewable energy supplies.	WO1	100%	No applications				
W5: Permissions for waste management development that include measures for water efficiency.	WO1	100%	13%	0%	No applications		
W6: Permissions for new landfill capacity that include landfill gas management systems.	WO1	100%	No applications				
W7: Permissions for new built waste management development that include provision for biodiversity enhancement.	WO2	100%	62%	38%	0%	100%	0%
W8: Permissions having an unacceptable adverse impact on landscape character, scheduled ancient monuments, listed	WO2	0	0	0	0	0	0

Indicator	Objective	Target	2013	2014	2015	2016	2017
buildings, conservation areas, battlefields or registered historic parks and gardens.							
W9: Permissions granted in the Malvern Hills or Cotswolds AONB.	WO2	No unacceptable adverse change in the quality or character of the landscape	No unacceptable adverse change				
W10: Permissions for new waste management development take into account local characteristics.	WO2	No unacceptable adverse impact on local characteristics	No unacceptable adverse impact				
W11: Permissions for new waste management development that take into account amenity considerations	WO2	No unacceptable adverse impact on amenity	No unacceptable adverse impact				
W12: Permission for new waste management development on Greenfield sites.	WO2	0	0	0	0	1	0
W13: Permission for new waste management development in the Green Belt.	WO2	No unacceptable cumulative impact on the purposes of Green Belt designation	No unacceptable cumulative impact				

Indicator	Objective	Target	2013	2014	2015	2016	2017
W14: Permissions granted in accordance with highways advice.	WO2	100%	100%	100%	100%	100%	100%
W16a: LACW waste sent to landfill.	WO3	Decrease in % of waste managed sent to landfill.	49%	49%	50%	49%	15%
W16b: Commercial and Industrial waste sent to landfill.	WO3	Decrease in % of waste managed sent to landfill.	Incomplete data		52%	41%	22%
W16c: Construction and Demolition waste sent to landfill.	WO3	Decrease in % of waste managed sent to landfill.	No available data				
W16d: Hazardous waste sent to landfill	WO3	Decrease in % of waste managed sent to landfill.	13%	15%	24%	78%	46%
W17a: Re-use, recycling and 'other recovery' of LACW waste	WO3	By 2020: 78% with minimum of 50% re-use and recycling	47.3%	48.7%	47.7%	37.9%	43.6%
W17b: Re-use, recycling and 'other recovery' of Commercial and Industrial waste	WO3	By 2020: 75% with minimum of 55% re-use and recycling	Incomplete data		48%	59%	78%
W17c: Re-use, recycling and 'other recovery' of Construction and Demolition waste	WO3	By 2020: 75% with minimum	No available data				

Indicator	Objective	Target	2013	2014	2015	2016	2017
		of 55% re-use and recycling					
W17d: Re-use, recycling and 'other recovery' of Hazardous waste	WO3	By 2020: 75%	87%	85%	76%	22%	54%
W18: Adoption of appropriate policies regarding managing waste arisings from all new development in City, Borough and District Councils DPDs	WO3 WO4	Adopted by all City, Borough and District Councils	None adopted			Adopted by all (1) City, Borough and District Councils	Adopted by all (2) City, Borough and District Councils
W19: Development permitted within 250m of waste management facilities against County Council advice	WO4 WO5	None	0	0	0	1	1
W20: Progress towards equivalent self-sufficiency in re-use and recycling capacity based on headline delivery milestones in Table 5 and Policy WO 2.	WO3 WO7	Achievement of headline delivery milestones in Table 5 and Policy WCS 2.	796161 tonnes	748176 tonnes	875513 tonnes	892674 tonnes	680127 tonnes
W21: Progress towards equivalent self-sufficiency in 'other recovery' capacity, based on headline delivery milestones in table 5 and Policy WO 2.	WO5 WO7	Achievement of headline delivery milestones as set out in Policy WCS2	123500 tonnes	2400 tonnes	167500 tonnes	89100 tonnes	201000 tonnes

Indicator	Objective	Target	2013	2014	2015	2016	2017
W22: Maintain equivalent self-sufficiency in sorting and transfer capacity.	WO5 WO7	No capacity gap for sorting and transfer	1127493 tonnes	737533 tonnes	740821 tonnes	793143 tonnes	806932 tonnes
W23a: Maintain equivalent self-sufficiency in disposal and landfill capacity for non-inert waste.	WO5 WO7	No capacity gap for disposal and landfill	5233320 tonnes	5041202 tonnes	4659000 tonnes	4457000 tonnes	4509000 tonnes
W23b: Maintain equivalent self-sufficiency in disposal and landfill capacity for inert waste.	WO5 WO7	No capacity gap for disposal and landfill	2964000 tonnes	2957850 tonnes	2894000 tonnes	2894000 tonnes	2525000 tonnes
W23c: Maintain equivalent self-sufficiency in disposal and landfill capacity for hazardous waste.	WO5 WO7	No capacity gap for disposal and landfill	294000 tonnes	273196 tonnes	375000 tonnes	248500 tonnes	247000 tonnes
W24: Applications for Waste Management development determined within 13 weeks.	WO5	100%	48%	95%	100%	100%	100%
W25a: Proportion of waste management applications discussed with Worcestershire County Council at pre-application stage.	WO5	Increase	76%	85%	67%	86%	100%
W25b: Number of waste management proposals discussed with Worcestershire County Council at pre-application stage.	WO5	Increase	Not monitored		21	28	20
W26: Permitted applications for waste management which include a consultation statement	WO6	100%	39%	29%	0%	12.5%	0%

Indicator	Objective	Target	2013	2014	2015	2016	2017
W27: Decisions where there are no policies in the Development Plan which are relevant to the application or relevant policies are out of date at the time of making the decision	WO6	None	0	0	0	0	0
W28: Increase in GVA in Worcestershire from Waste Management.	WO7	Increase	£208m	£231m	£257m	£258m	£221m
W29: Permitted 'other recovery' and disposal (excluding landfill) capacity at each level of the geographic hierarchy.	WO8	100% of new 'other recovery' and disposal (excluding landfill) capacity at level 1 and 2 of the geographic hierarchy.	No applications	50%	No applications	0%	No applications
W30: Permitted re-use, recycling, storage, sorting and transfer capacity at each level of the geographic hierarchy.	WO8	More than 50% of new re-use, recycling, storage, sorting and transfer capacity at level 1 and 2 of the geographic hierarchy.	0%	33%	50%	75%	50%

Appendix B: Minerals data tables

Where a cell is grey, this indicates a lack of applications relevant to this indicator, except where further clarification is given, for example where data is not available.

Indicator	Target	2013	2014	2015	2016	2017
M1: Permissions for minerals development granted contrary to Environment Agency advice on flooding.	None		0		0	
M2: Permissions for minerals development granted contrary to Environment Agency advice on water quality.	None		0		0	
M3: Permissions for minerals development that include provision for energy efficiency.	100%		0%		0%	
M4: Permissions having an unacceptable adverse impact on landscape character, scheduled ancient monuments, listed buildings, conservation areas, battlefields or registered historic parks and gardens.	None		0		0	
M5: Permissions granted in the Malvern Hills or Cotswolds AONB.	No unacceptable adverse change in the quality or character of the landscape.		0		No unacceptable adverse impact	
M6: Permissions for minerals development take into account local characteristics.	No unacceptable adverse impact on local characteristics.		0		No unacceptable adverse impact	

Indicator	Target	2013	2014	2015	2016	2017
M7: Permissions for minerals development that take into account amenity considerations.	No unacceptable adverse impact on amenity.		No unacceptable adverse impact		No unacceptable adverse impact	
M8: Permissions granted in accordance with highways advice.	100%		0		100%	
M9: Production of secondary and recycled aggregates.	Monitor baseline	No data available				
M10: Applications for waste management/minerals development determined within 13 weeks.	100%		100%		100%	
M11a: Proportion of approved applications discussed with Worcestershire County Council at pre-application stage.	Increase		50%		100%	
M11b: Number of proposals discussed with Worcestershire County Council at pre-application stage	Increase	Not monitored	13	6	8	10
M12a: Annual production of primary land won aggregates (Sand and Gravel).	Monitor baseline		0.620 million tonnes	0.538 million tonnes	0.399 million tonnes	0.455 million tonnes
M12b: Annual production of primary land won aggregates (Crushed Rock).	Monitor baseline		0 tonnes	0 tonnes	0 tonnes	0 tonnes
M13: Landbank of permitted sand and gravel reserves.	Minimum 7 years		Unknown	1.41 – 1.48 years	6.99 – 7.07 years	6.06 years
M14: Landbank of permitted crushed rock reserves.	Minimum 10 years		0 years	0 years	0 years	0 years

Indicator	Target	2013	2014	2015	2016	2017
M15: Landbank of permitted clay reserves.	Minimum 25 years	Unknown	71 to 78 years	70 to 77 years	69 to 76 years	68 to 75 years
M16: Sufficient productive capacity for sand and gravel supply.	Monitor baseline		6 sites	6 sites	6 sites	4 sites
M17: Sufficient productive capacity for crushed rock supply.	Monitor baseline		0 sites	0 sites	0 sites	0 sites
M18: Sufficient productive capacity for clay supply.	Monitor baseline		2 sites	2 sites	2 sites	2 sites
M19: Permitted applications for minerals development which include a Consultation Statement.	100%		0%		66%	
M20: Decisions where there are no policies in the Development Plan which are relevant to the application or relevant policies are out of date at the time of making the decision.	None		1		2	
M21: New mineral development in 'preferred areas'.	100% in Preferred Areas identified in the Adopted Hereford and Worcester Minerals Local Plan.	Not monitored			50% in Preferred Areas identified in the Adopted Hereford and Worcester Minerals Local Plan.	
M23: Annual production of silica sand.	Monitor baseline	Unknown				
M24: Landbank of permitted silica sand reserves.	Monitor baseline	Unknown				
M25: Annual production of building stone.	Monitor baseline		0 tonnes	0 tonnes	0 tonnes	0 tonnes

Indicator	Target	2013	2014	2015	2016	2017
M26: Landbank of permitted building stone reserves.	Monitor baseline		0 years	0 years	0 years	0 years
M27: Increase in GVA in Worcestershire from minerals development	Monitor baseline		£11 million	£6 million	£10 million	£11 million