DERBYSHIRE AND DERBY MINERALS LOCAL PLAN

Towards a Minerals Local Plan: Spring 2018 Consultation

CHAPTER 12

12.3 Restoration Strategy for the Carboniferous Limestone Quarries

December 2017

DERBYSHIRE County Council

Derby City Council

Introduction

12.3.1 A variety of minerals are excavated from 'hard rock' quarries within the Plan area; predominantly limestone but also some sandstone. The majority of the limestone quarries lie on the Carboniferous Limestone deposit, a nationally important source of both aggregate and industrial mineral, which is quarried extensively within the Plan area. The Carboniferous Limestone also gives rise to landscapes and habitats which are designated for their quality and which lie close to the Peak District National Park. The MPAs consider that the restoration of these quarries, taken together with their sensitive location, raises particular issues which merit the preparation of a separate restoration strategy.

12.3.2 Many of these quarries are large scale and were established before the advent of modern planning conditions; they have vast permitted reserves of mineral that will last well beyond the end of the Plan period in 2030. The original planning permissions that established these limestone quarries had few controls by current standards e.g. there were little in the way of environmental controls (no restrictions on hours of operation, no noise or blasting conditions, no dust controls), or landscaping and restoration conditions etc. Whilst planning conditions have now been updated for all existing operational sites under the Review of Old Mineral Permissions (ROMP)[1] process, they remain subject to future periodic reviews.

12.3.3 The scale of hard rock quarries and the often relatively small quantities of waste material involved compared to the rock which is removed means that it is not generally possible to restore land to its original levels following completion of working. This means that the configuration of the land is changed permanently, although where the operation can be designed so as to be visually contained by the existing topography in advance of working, visual impact can be limited. Progressive restoration is difficult to achieve, although an early start can often be made in the treatment of the quarry faces, benches and tips. Innovative restoration blasting techniques can be used to create more varied and more natural looking slope sequences consisting of rock screes, buttresses and

[1] Review of Mineral Planning Conditions (NPPG Reference ID: 27-189-20140306)

headwalls, which can be vegetated selectively to replicate natural limestone valley sides.

12.3.4 Final restoration depends to a large extent on the depth of the quarry and level of the water table. Restoration incorporating water is often an unavoidable consequence of working at depth; deeper remote quarries are often left to regenerate naturally and, in such cases, they can become important areas for wildlife and natural history. In shallower quarries, the quarry floor can be restored for agriculture or informal leisure uses, or in a few cases built development, where appropriate.

12.3.5 The preparation of the Minerals Local Plan presents an opportunity for the mineral planning authority to ensure that a co-ordinated approach is taken towards mineral restoration at Carboniferous Limestone quarries by establishing a framework of strategic principles aimed at delivering a co-ordinated approach to the restoration of the quarries. This strategic framework would guide operators in preparing their ROMP submissions to review their current planning permissions, and would enable any new or revised working and restoration schemes to be guided by the overall strategic principles. It could also act as a guide for applicants submitting planning applications for any new limestone working.

National and Local Policy

12.3.6 Paragraph 143 of the National Planning Policy Framework (NPPF) requires that in preparing local plans mineral planning authorities should put in place polices to ensure that worked land is reclaimed at the earliest opportunity, taking account of aviation safety, and that high quality restoration and aftercare of mineral sites takes place, including for agriculture (safeguarding the long-term potential of the best and most versatile land and conserving soil resources), geodiversity, biodiversity, native woodland, the historic environment and recreation.

12.3.7 Paragraph 37[2] of National Planning Practice Guidance (NPPG) advises that the most appropriate form of site restoration to facilitate different potential after-uses should be addressed in firstly both local minerals plans, which should include policies to ensure that worked land is reclaimed at the earliest opportunity and that high quality restoration and aftercare of mineral sites takes place, and secondly on a site-by-site basis following discussions between the minerals operator and the mineral planning authority.

12.3.8 Paragraph 38[3] of NPPG highlights a number of key stages involved in the restoration and aftercare of mineral sites.

- Stripping of soils and soil-making material and either their storage or their direct replacement (i.e. restoration) on another part of the site;
- Storage and replacement of overburden;
- Achieving landscape and landform objectives for the site, including filling operations if required, following mineral extraction;
- Restoration, including soil placement, relief of compaction and provision of surface features;
- Aftercare to ensure that following restoration the land is brought up to the required standard for its intended after-use.

[2] NPPG Reference ID:27-037-20140306
[3] NPPG Reference ID: 27-038-20140306

12.3.9 Paragraph 40[4] of NPPG (Minerals) sets out the level of detail that should be submitted on restoration and aftercare at the planning application stage. To some extent it will depend on the individual circumstances at each site, including the expected duration of operations. The information must be able to demonstrate that the overall objectives of the restoration scheme are practically achievable and it would normally include:

- an overall restoration strategy, identifying the proposed after-use of the site;
- Information about soil resources and hydrology, and how the topsoil/subsoil/overburden/soil making materials are to be handled whilst extraction is taking place;
- where land is agricultural land, an assessment of the agricultural land classification grade; and
- landscape strategy.

12.3.10 Paragraph 59[5] of the NPPG advised on the type of information that should be included in a landscape strategy as follows:

- defining the key landscape opportunities and constraints;
- considering potential directions of working, significant waste material locations, degrees of visual exposure etc.;
- identifying the need for additional screening during operations;
- identifying proposed after uses and options for the character of the restored landscape

Review of Old Mineral Permissions (ROMP) process

12.3.11 The Review of Old Mineral Permissions (ROMP) process was established to enable the Mineral Planning Authority (MPA) to review and improve older planning permissions by imposing revised or new operating, restoration and aftercare conditions to ensure that sites, particularly those with long timescales, operate to continuously high working and environmental standards. The Initial Review process, introduced by the 1995 Environment Act, allowed the MPA to update the

[4] NPPG Reference ID: 27-040-20140306
[5] NPPG Reference ID: 27-059-20140306

older mineral planning permissions by imposing improved operating, restoration and aftercare conditions upon the sites.

12.3.12 The Periodic Review process enables the MPA to continually review and update conditions to ensure that sites, particularly those with long timescales, operate to continuously high working and environmental standards. There are limitations on the modifications to conditions which the MPA can make in that it may be liable for compensation claims for restrictions on the winning and working of minerals or the depositing of mineral waste if the revisions 'prejudice adversely and to an unreasonable degree the economic viability of operating the site or the asset value of the site'.

12.3.13 Under the 'Review' process, mineral permissions without time limits were given a common expiry date of 2042. At that time, where workable deposits remain, an application for renewal will need to be made.

Adopted Derby and Derbyshire Minerals Local Plan

12.3.14 The adopted Derby and Derbyshire Minerals Local Plan, 2000 with coal alteration adopted 2002, has policies for both existing and proposed mineral workings in the Plan area, which include protecting the environment and providing for progressive restoration to a beneficial after-use. Policies seek to:

- strike a balance between the demand for all mineral resources and the need to protect the environment, having regard to the principles of sustainable development.
- protect the character, quality and the diversity of the County's landscapes including their nature conservation, historic and water environments.
- provide for enhancement of the environment, reflecting the major opportunity that restored mineral sites can contribute.

Consultation So Far – What you have told us

Issues and Options Consultation 2010

Stakeholder Workshop 2009

12.3.15 We held a stakeholder workshop in 2009, which scoped the issues to be addressed in the Plan. Stakeholders recognised the need for mineral extraction, provided that its impact on communities and the environment is minimised.

Issues and Options Consultations 2010

12.3.16 The Issues & Options Consultation 2010 set out an initial vision and objectives for the Plan area and included the critical issues and options that needed to be addressed. In terms of restoration the main objective was to ensure that after extraction, land is reclaimed at the earliest opportunity, and that high quality restoration and aftercare takes place which maximises community and environmental benefits and makes optimum use of inert fill material.

12.3.17 It was considered that this objective could be achieved in the most part by plan wide development management policies covering restoration. For two areas, however, the Trent Valley and the A515 Carboniferous Limestone quarries, options were put forward that included the preparation of specific strategies to address restoration issues in these areas.

12.3.18 The option of preparing a co-ordinated restoration strategy for the four limestone quarries lying to the west of the A515 near Buxton was suggested in view of the significant impact of these quarries on the surrounding landscape, particularly the Peak District National Park and, in view of the previous co-ordinated restoration approach taken as part of the ROMP process which resulted in revised and consistent planning conditions being issued for all four sites in 1998. The consultation put forward the option of having a comprehensive strategy for the restoration of the four quarries (Option 1). The second option (Option 2) was to apply a strategic criteria based approach to the restoration of these quarries, based on local circumstances, devising restoration schemes for quarries as they arise, guided by circumstances specific to the particular quarry only.

12.3.19 The Consultation generated fourteen responses to the question:

- Eleven of the fourteen thought that Option 1 was the right approach (4 environmental groups; 4 operators; 2 local authorities; 1 parish council)
- Two thought that Option 2 was the right approach (1 individual and 1 interest group)
- One proposed a different option i.e. a combination of both options (individual)

12.3.20 Whilst the response was fairly limited, we can conclude from those initial results that stakeholders have expressed support for the development of a comprehensive restoration strategy for the A515 corridor rather than a piecemeal approach to restoration. Further information is available in the following documents:

Derby and Derbyshire Minerals Local Plan: Issues and Options Consultation, 2010.

Responses to Derby and Derbyshire Minerals Local Plan Issues and Options Consultation, 2011.

Interim Sustainability Appraisal of the Issues and Options Consultation 2010

12.3.21 The Interim Sustainability Appraisal Report concluded that, Option 1 is expected to perform better with regards to achieving sustainability objectives related to heritage and landscape, biodiversity (flora and fauna), land and water resources, communities and health and the local economy by providing a strategic landscape management scheme for this area. In particular, significant positive effects upon the local landscape along this corridor and potentially indirect positive effects on the setting of the nearby Peak District National Park are expected under Option 1, as it will ensure a particular standard is met for all sites in terms of restoration objectives, management and aftercare and this will also provide certainty to the minerals

industry. We have taken these considerations into account in developing our Strategy for the A515 quarries. The full Appraisal is set out in the following document:

Towards a Minerals Local Plan: Rolling Consultation 2015-2016

Interim Sustainability Appraisal (SA) Report, November 2013

Towards a Minerals Local Plan: Rolling Consultation 2015-2017

12.3.22 Since the publication of the Issues and Options Report 2010, the NPPF (2012) and NPPG (2014) have been published; we have revisited the concept of preparing a strategy for the A515 limestone quarries in light of this new policy and guidance. We have considered the extent to which the Issues and Options Report and the responses to it remain helpful in the development of the strategy and taken on board additional evidence collected since 2010, including the findings of the Interim Sustainability Appraisal.

12.3.23 The NPPF reaffirms general restoration principles by requiring MPAs, in their local plans, to put in place policies to ensure that worked land is reclaimed at the earliest opportunity and that high quality restoration and aftercare of mineral sites takes place. The NPPG also advises MPAs to include policies to ensure that the most appropriate form of restoration takes place to facilitate different potential after-uses.

12.3.24 The restoration and after-use of a site will depend on the type of mineral, nature of extraction, availability of fill material, as well as the general characteristics and local planning policies for the area. The NPPF seeks to enhance valued landscapes and sets out that mineral restoration schemes should be informed by the wider landscape character, ensuring that schemes are compatible with the surrounding landscape. The NPPF requires MPAs to plan for biodiversity at a landscape scale. The restoration of mineral workings can offer important opportunities for the establishment or re-establishment of priority habitats and

consequently provide net gains in biodiversity, particularly through linking fragmented areas of habitat types, delivering local ecological networks across the wider landscape.

Towards a Minerals Local Plan – Rolling Consultation 2015-2016: Towards a Restoration Strategy for Carboniferous Limestone Quarries

12.3.25 The 'Towards a Restoration Strategy for Carboniferous Limestone Quarries Paper, April 2016 identified several issues that would need to be considered in developing the restoration strategy.

Issue 1: Extending the remit of the Strategy

12.3.26 In view of the Government's policy support for the concept of strategic restoration and taking into account previous support shown for the approach of having a restoration strategy for the A515 quarries and the favourable assessment shown in the Interim Sustainability Appraisal, the Paper considers whether the Strategy should be extended.

12.3.27 The Paper asked the following question and put forward three possible Options for consultation:

What area should the Strategy cover?

- Option 1: Prepare the Strategy to apply to the A515 quarries only
- Option 2: Prepare the Strategy to apply to all of the hard rock quarries within the Carboniferous Limestone
- Option 3: Prepare the Strategy to apply to all hard rock quarries within the Plan area.

12.3.28 The Consultation received only one response from Tarmac who favoured Option 1 because the co-ordinated approach to the restoration of the A515 quarries is logical given their proximity to one another and the existence of shared opportunities and constraints. In respect of 'Option 2' and 'Option 3', Tarmac stated that 'a blanket restoration strategy for all quarries within the carboniferous limestone/ Plan area is not appropriate as it would not take into account the

individual circumstances/ opportunities afforded by limestone quarries located within other parts of the Plan area.' Details of the representation received together with considered responses and outcomes is set out in the following document.

Towards a Minerals Local Plan: Spring 2018 Consultation

Report of Representations, December 2017

Issue 2: What are the issues that affect the restoration of hard rock quarries?

12.3.29 The Paper set out the main issues that would need to be addressed in developing the Strategy and asked the question if there were any other issues that should be included. No responses were received to this question.

Issue 3: Draft Principles for the restoration of hard rock quarries

12.3.30 The Paper set out a range of draft principles that would address the issues raised and deliver a co-ordinated approach to restoration. The principles would need to be taken into account by operators in preparing proposals for new developments or those affecting existing quarries. The Paper asked consultees if they agreed with the principles and if there were any others that should be added. No responses were received to this question.

Duty to Co-operate

12.3.31 Duty to Co-operate is a way of planning strategically for significant cross border issues and a legal requirement of Plan preparation. Irrespective of the area that the strategy will cover, the development of the restoration strategy is considered to be a strategic issue as the restored sites will cover a large area and can have an impact on adjoining administrative areas. In view of the location of many of the hard rock quarries adjacent or close to the Peak District National Park it is particularly important that we take into account impacts on the Park and achieve a co-ordinated approach to restoration. The issue is included in the list of Duty to

Co-operate topics requiring co-operation. Further details can be found in the following Report.

Towards a Minerals Local Plan: Spring 2018 Consultation

Duty to Co-operate Report: Background and Progress,

December 2017

12.3.32 In developing the strategy, therefore, we will work closely with mineral operators, local planning authorities, adjoining mineral planning authorities, the Peak District National Park Authority and other organisations, for example, the Local Nature Partnership, in order to achieve a co-ordinated approach to restoration.

Sustainability Appraisal

12.3.33 The Sustainability Appraisal process is a way of promoting sustainable development through the better integration of sustainability considerations throughout the preparation of the Plan. The process involves testing the impact of the Plan against a series of Sustainability Objectives. Where the process recommends improvements to the Plan, these will be incorporated. A sustainability appraisal was undertaken on all the Papers that constituted the Towards a Minerals Local Plan Rolling consultation 2015-2017 and all of the sites that were promoted by operators. The full appraisal is set out in the following document:

Towards a Minerals Local Plan: Spring 2018 Consultation

Interim Sustainability Appraisal (SA) Report,

December 2017

Where appropriate the findings of the SA have been incorporated into the Proposed Approach set out below.

Outcomes for the Proposed Approach

Vision and Objectives

12.3.34 Chapter 3 of this Consultation contains the Plan's proposed Vison and Objectives. The Vision is about what the Plan area will be like in terms of mineral development in 2030 if the policies and proposals of the Plan have been successfully delivered over the Plan period. The Objectives set out the key goals that will need to be attained to make the Vision a reality. The Strategy will be developed in order to achieve the Objectives and deliver the Vision. The contribution that the individual draft policy in this Chapter will make towards achieving the overall draft Vision and Objectives of the Plan, is set out below the Policy at the end of this Chapter.

12.3.35 The Rolling Consultation included key issues that needed to be addressed in order to develop the Restoration Strategy.

Issue: Extending the remit of the Strategy

12.3.36 The original concept for the strategy was to apply to the four A515 quarries only. However as part of the Rolling Consultation the MPAs put forward a further two options for extending the remit of the strategy to include hard rock quarries on the Carboniferous Limestone and to include all hard rock quarries within the Plan area. Only one response was received which supported restricting the Strategy to the A515 quarries only.

12.3.37 Whilst limiting the area of the Strategy to the A515 quarries would enable a consistent continuation of the earlier work already undertaken for the four quarries, it would result in the established principles applying to a restricted area only. Notwithstanding the response, therefore, the MPAs consider that the area covered by the Strategy should be extended to include all hard rock quarries on the Carboniferous Limestone. The reasons for extending the area of the Strategy are as follows. Many of the hard rock limestone quarries:

- are large scale and long-term, consequently exerting significant environmental impacts,

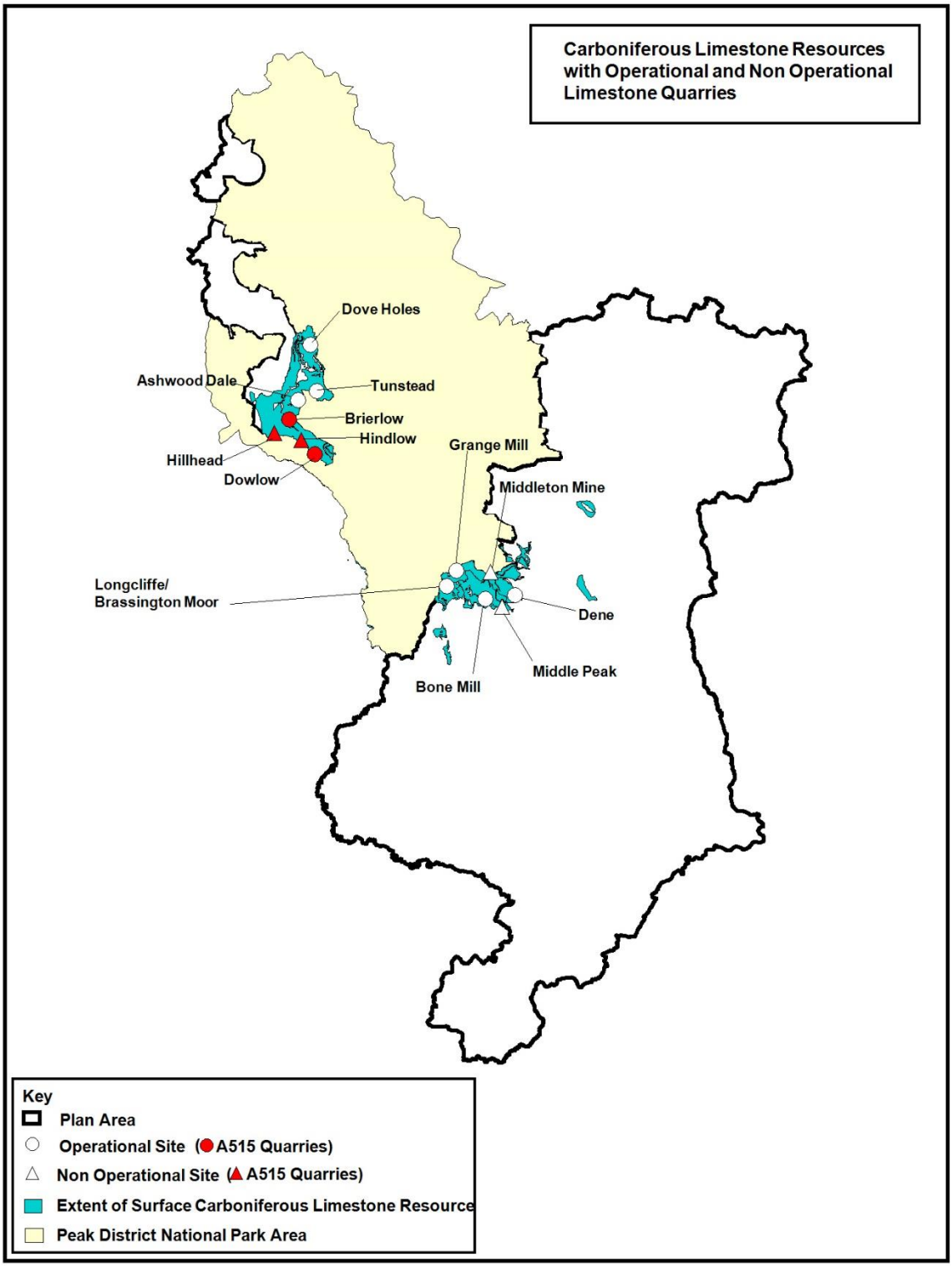
- lie in sensitive locations close to the Peak District National Park and in some cases have adjoining boundaries,
- lie close to each other and in some cases have contiguous boundaries and therefore would benefit particularly from co-ordinated restoration schemes,
- were granted planning permission before the advent of the modern planning system and, whilst all existing operational sites have modern conditions they remain subject to future periodic reviews,
- are ‘dormant’ or ‘inactive’ and therefore future working and restoration could be informed by a strategy

12.3.37 The Strategy would set out a framework of strategic principles that would deliver a preferred pattern of restoration for all hard rock quarries within the Carboniferous Limestone and would provide consistent advice to all operators across the White Peak landscape within the Plan area. The Sustainability Appraisal acknowledges the benefit of preparing a restoration strategy to coincide with the landscape character type.

12.3.38 The MPAs consider that the third Option to extend the Strategy to include all hard rock quarries within the Plan area is not appropriate for the following reasons. Whilst there are other hard rock quarries lying with the Plan area such as sandstone quarries used mainly for building stone, these tend to be much smaller in scale, worked more infrequently and consequently are less intrusive. Similarly, there are hard rock quarries lying on the Permian Limestone, in the east of the County, but the colour of the stone, scale of working and the character of the surrounding landscape tends to make them less intrusive and easier to restore.

Outcome for the Proposed Approach

12.3.39 Extend the remit of the Strategy to include all hard rock Carboniferous Limestone quarries. The Map below shows the location of existing permitted active and inactive carboniferous limestone quarries at the end of 2017.



Issue 2: What are the issues that affect the restoration of hard rock Carboniferous Limestone quarries?

12.3.40 In order to develop restoration principles for the hard rock quarries on the Carboniferous Limestone it is important to think about what the issues are that particularly affect the restoration of such quarries. The previous Consultation set out what we thought the main issues were that would need to be addressed in developing the Strategy. In the absence of any response the MPA consider that all the necessary issues have been taken into account. These are set out below:

- The scale of the quarries in terms of surface area and depth of extraction prevents infilling to original ground levels and landforms. New landforms and levels therefore impose restoration constraints.
- The quarries are often very long-term developments (i.e. +25 years), with the current quarry form having evolved over many years, but with full restoration often not due for several decades more.
- Workings often involve simultaneous extraction from different parts of the quarry to obtain appropriate blending so affecting timing and ability for phased restoration.
- The quarries are often located in areas of high landscape value, including areas bordering the Peak District National Park and contrasting distinctly with the established landscape character of the area.
- The quarries are often liable to water infiltration affecting the scope of restoration options.
- The high level of connectivity of the water environment in limestone areas means that impacts of quarrying in one area could affect a much wider area. Some of the most ecologically rich, internationally important biodiversity sites are dependent on existing stream flows, seepages and springs, which can be threatened by quarrying if flows are intercepted or diverted. These ecological designations and the need to protect such sites may define or curtail site working in some areas.
- The quarries often lack sufficient soils to achieve traditional restoration through infilling.

Outcome for the Proposed Approach

12.3.41 Develop the Strategy's restoration principles based on the issues identified above.

Issue 3: Principles for the restoration of hard rock quarries

12.3.42 The Strategy will include a framework of strategic principles that will address the issues raised and deliver a co-ordinated approach to restoration. These principles will need to be taken into account by operators in preparing proposals for new developments or those affecting existing quarries. The previous Consultation set out what we thought the range of principles should cover; in the absence of any response the MPA consider that the principles form a comprehensive basis on which to inform the development of the Strategy.

Outcome for the Proposed Approach

12.3.43 Develop a restoration strategy based on the principles set out in the previous Consultation.

The Proposed Approach

12.3.44 The preparation of a restoration Strategy for the Carboniferous Limestone quarries will ensure that a co-ordinated approach is taken towards mineral restoration that will deliver a preferred pattern of working and restoration. The Strategy will establish a set of principles intended to guide operators in preparing their ROMP submissions to review their current planning permissions; any new or revised working and restoration schemes would be guided by the strategic principles. It will also act as a guide for applicants submitting planning applications for any new limestone working.

12.3.45 At this stage, a policy setting out the strategic principles has been included. The MPA is considering whether to produce more detailed guidance on the restoration of hard rock Carboniferous Limestone quarries in the form of a separate Supplementary Planning Document to the Local Plan, to be prepared after the Plan is adopted.

12.3.46 This would enable the MPA to work closely with mineral operators, landowners, district planning authorities (High Peak and Derbyshire Dales) and adjoining MPAs (Peak District National Park Authority) to help ensure a co-ordinated approach is taken in the preparation and development of a detailed strategy, recognising its application to the wider area.

Policy for the Restoration of Hard Rock Carboniferous Limestone Quarries

Policy R3: Restoration of Carboniferous Limestone Quarries

Proposals for the restoration of Carboniferous Limestone quarries should take into account the following principles:

- The design of quarry development proposals should inform and take into account the requirements for progressive restoration;
- Waste placement needs to be carefully planned to avoid sterilisation of mineral resource, minimise double handling of material where possible, or lead to the imposition of artificial constraints to restoration;
- Development should seek to achieve the highest possible standard of restoration to minimise the long-term impacts of the site regardless of the level of that impact;
- Restoration proposals should be based around a clear and comprehensive restoration strategy, and seek to maximise opportunities for phased and progressive restoration.
- The form of restoration should reflect the character of the White Peak landscape in which the quarry is located taking into account:
    - The high landscape value and distinctive character of the area
    - The proximity to the Peak District National Park

- Restoration proposals should aim to reduce the visual footprint of the quarry and assimilate it into the surrounding landscape.
- Restoration proposals should incorporate the techniques most appropriate to the location and size of the quarries.
- The form and design of restoration proposals should seek to deliver conditions for appropriate after-uses which provide benefits to the economy, environment and local communities.
- The form and design of restoration proposals should seek to increase the biodiversity interests of the area, recognising the value of key habitats (limestone grasslands, limestone dale grasslands and woodlands) in the surrounding landscape, and the opportunities to recreate/replicate these within the new landform of a worked out and restored quarry.

Contributes to achieving proposed Objectives

- **Objective 5 – Minimising Impacts on Communities**
- **Objective 6 – Protecting the Natural and Built Environment**
- **Objective 8 – Minimising Flood Risk and Climate Change**

Do you have any comments on the proposed approach to the restoration strategy for Carboniferous Limestone quarries, as set out in this chapter?