

# NCA 141: Mendip Hills

## Informing Landscape-scale initiatives

Part One

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**Somerset Wildlife Trust**

Wednesday 20<sup>th</sup> November 2013

Bath Royal Literary and Scientific Institution,  
16-18 Queen Square, Bath





## Mendip Hills Living Landscape

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Somerset Wildlife Trust  
107014566 (2011)

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Date:  
24/09/2013

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## Protecting **Wildlife** for the Future

# Somerset Wildlife Trust – one of 36 Wildlife Trusts in England



Protecting **Wildlife** for the Future

# Mendip Hills Living Landscape – one of over 100 living landscapes in the UK



Protecting **Wildlife** for the Future

# A recovery plan for nature

## Restore, recreate, reconnect

Living Landscapes are a recovery plan for nature championed by The Wildlife Trusts since 2006 to help create a resilient and healthy environment rich in wildlife and to provide ecological security for people.



## In a Living Landscape

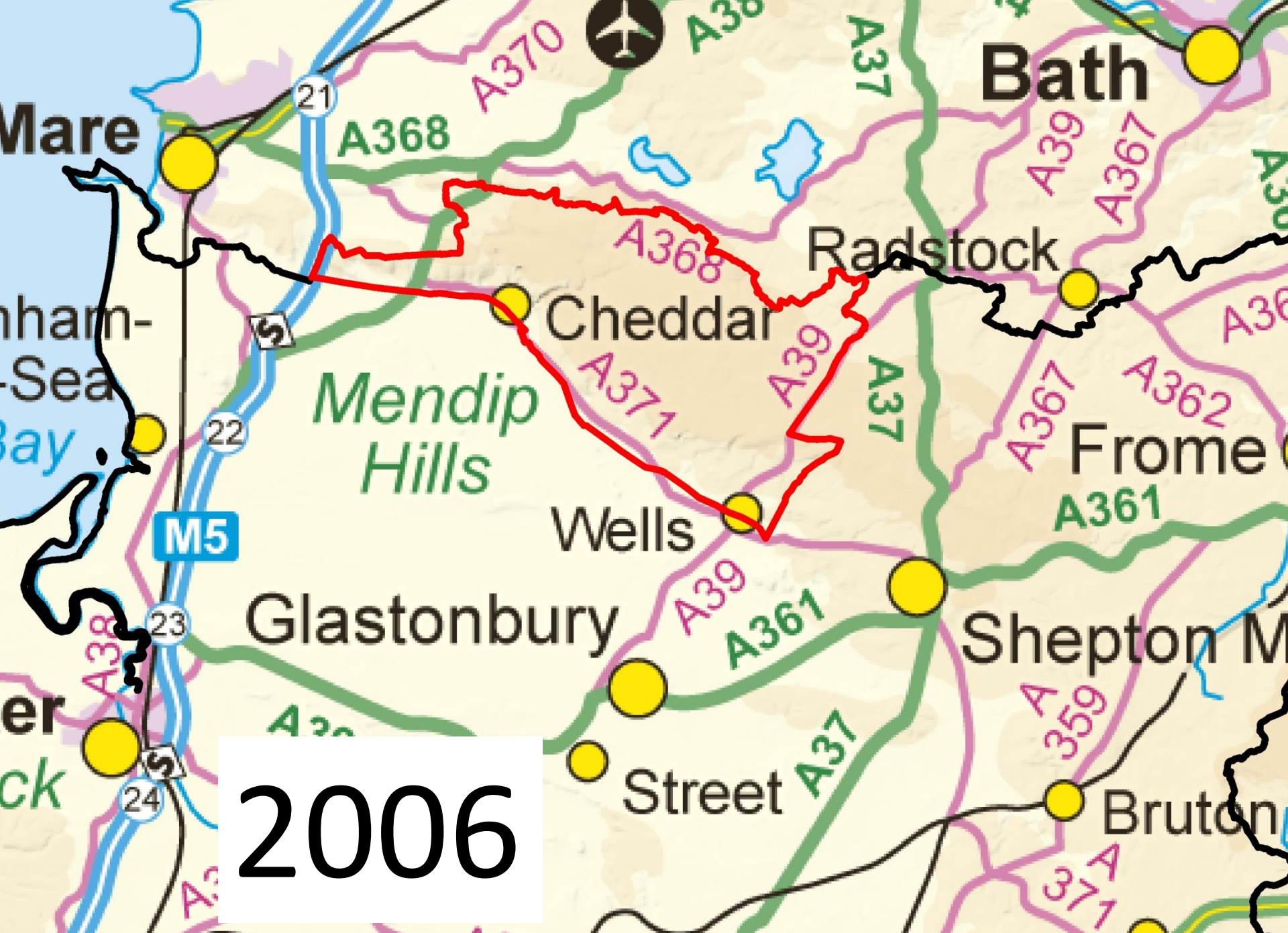
...wildlife, habitats and ecosystems are recovering from past declines as we use and manage our land in greater harmony with nature

...wildlife and people are adapting well to climate change and natural processes are helping to reduce climate impacts

...people are inspired by, and engaged in, protecting the wildlife they experience

...people recognise the economic and social value of nature and the many ways it improves their quality of life

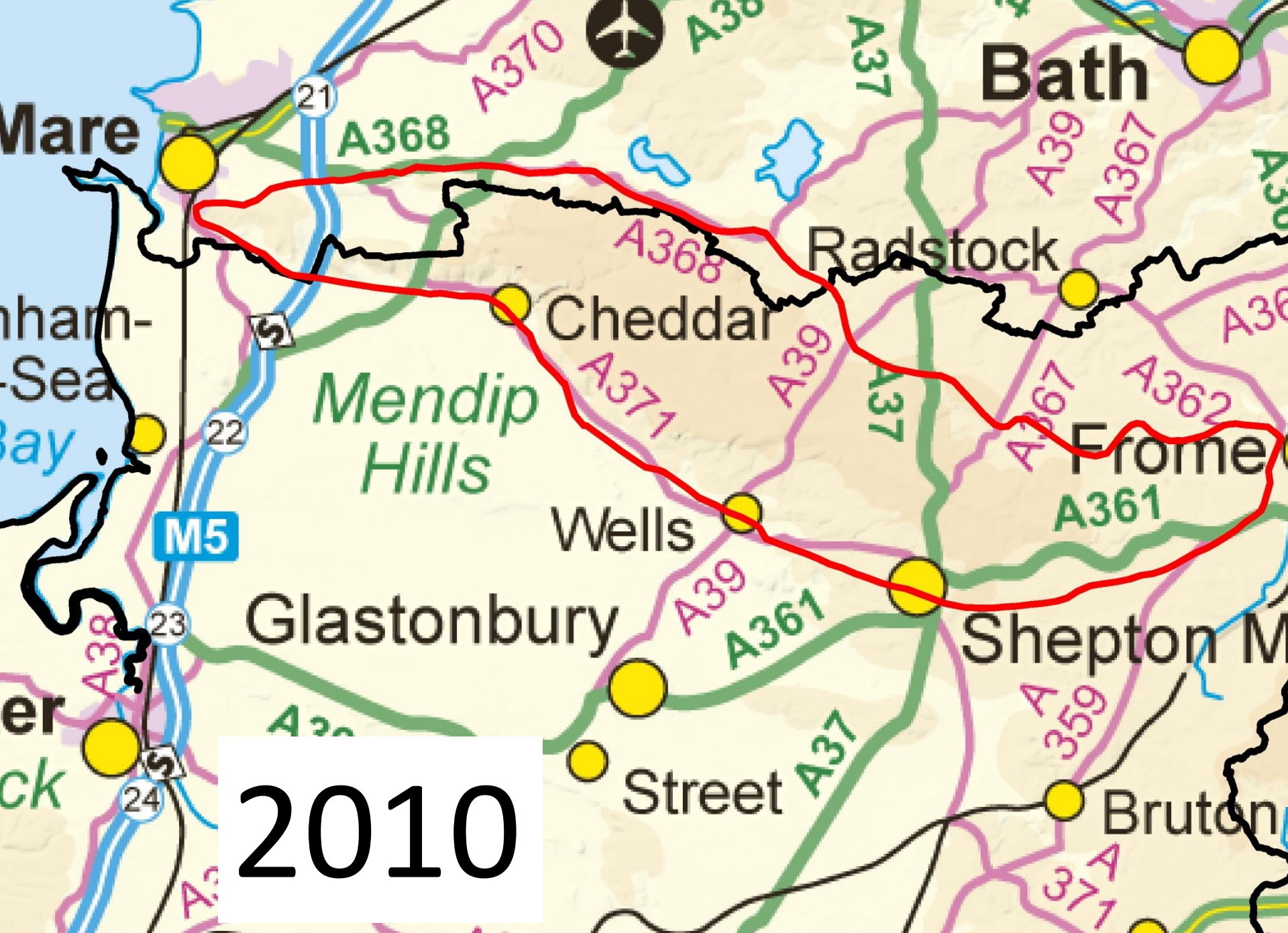




2006



2009



2010

# 141. Mendip Hills

Introduction & Summary

Description

Opportunities

Key facts  
and data

Landscape  
change

Analysis

Supporting documents



[www.naturalengland.org.uk](http://www.naturalengland.org.uk)







The Mendip Hills are the southernmost outcrop of carboniferous limestone in the UK.

The Mendip Hills National Character Area 141 covers this outcrop

The calcareous grassland and ash-lime woodlands supported by this substrate are of national and European importance.

Most of the landscape (19,500ha) is being used by farmers to grow grass for milk and beef at competitive prices.

Somerset is the largest producer of crushed-rock aggregate in the south of England.

Current average 10 year sales data = 10.82 million tonnes pa

The vast majority comes from the quarries in the eastern part of the NCA (two have their own rail heads connecting to the main line). Quarry companies own nearly 2000ha of the land



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# Making Space for Nature:

## A review of England's Wildlife Sites and Ecological Network

Chaired by Professor Sir John Lawton CBE FRS

Submitted to the Secretary of State, the Department for Environment, Food and Rural Affairs September 2010

### Key messages:

Improve the quality of current sites by better habitat management - **Better**

Increase the size of current wildlife sites - **Bigger**

Create new sites - **More**

Enhance connections between, or join up, sites, either through physical corridors, or through “stepping stones” – **Joined up**

Reduce the pressures on wildlife by improving the wider environment including through buffering wildlife sites – **Reduced pressure**



## National Planning Policy Framework

117. To minimise impacts on biodiversity and geodiversity, planning policies should:

- plan for biodiversity at a landscape-scale across local authority boundaries;
- identify and map components of the local ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity, wildlife corridors and stepping stones that connect them and areas identified by local partnerships for habitat restoration or creation;
- promote the preservation, restoration and re-creation of priority habitats, ecological networks and the protection and recovery of priority species populations, linked to national and local targets, and identify suitable indicators for monitoring biodiversity in the plan;

# County Minerals

## Plan review:

Options Consultation  
Dec 2011- Feb 2012

Opinion was split on many of the aggregate issues and options e.g. the size of the crushed rock landbank, additional reserves **and the restoration of sites.**

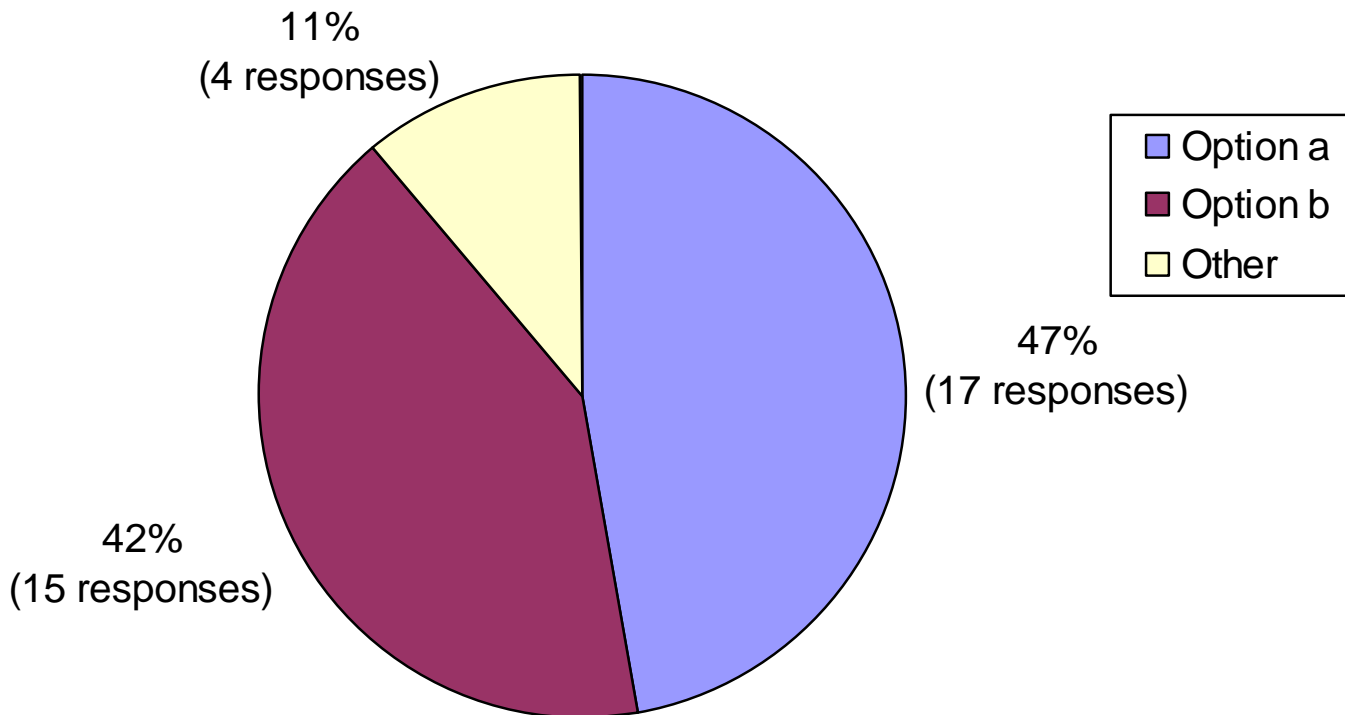


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## Issue A5: Restoration and after-use in the East Mendips

**Option a:** Restoration and after-use of quarry sites should be determined on a site by site basis.

**Option b:** Restoration should be determined by meeting criteria defined in an agreed long term strategic landscape scale restoration strategy for the East Mendips.



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## Preferred Policy SMP5: Restoration and After-use

Restoration and after-use proposals for aggregate sites should seek to contribute to and enhance the local environment by minimising impacts on and providing net gains for habitats, biodiversity, geodiversity, landscape and communities and providing gains that improve the resilience of ecological networks. Proposals should demonstrate how the listed criteria have been met.

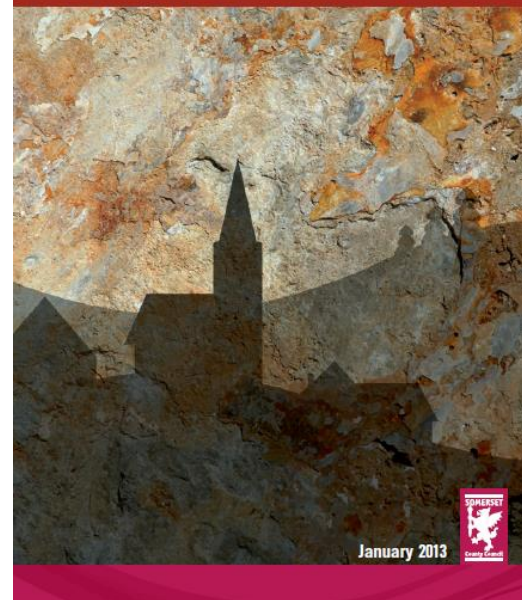
### Criteria:

- a) Demonstrate a high level of collaboration with other land uses/management practices/programmes/quarry operators/conservation bodies to contribute to landscape-scale restoration.
- b) Support improved public access to the natural environment.
- c) Provide a broad range of potential after uses for the community – leisure and amenity opportunities for example, that do not conflict with biodiversity and ecological networks.
- d) Minimise impacts to an acceptable level on the visual impact of mineral development on the surrounding environment and communities.
- e) Minimise impacts to an acceptable level on and provide net gains in biodiversity, thereby contributing to the Government's commitment to enhance biodiversity including by establishing coherent ecological networks that are more resilient to current and future pressures.
- f) Contribute to the achievement of UK Biodiversity Action Plan (UK BAP) and Local Biodiversity Action Plan (LBAP) habitat and species targets.
- g) Demonstrate the consideration and use of biodiversity offsetting using the biodiversity methodology developed by Somerset County Council<sup>27</sup>.
- h) Provide benefits beyond planning permission boundaries.
- i) Provide for adaptation or mitigation to impacts of climate change on habitats, species and ecological networks.

**N.B.** Further supporting information explaining the listed criteria above can be found in Topic Paper 5.

## Minerals Preferred Options

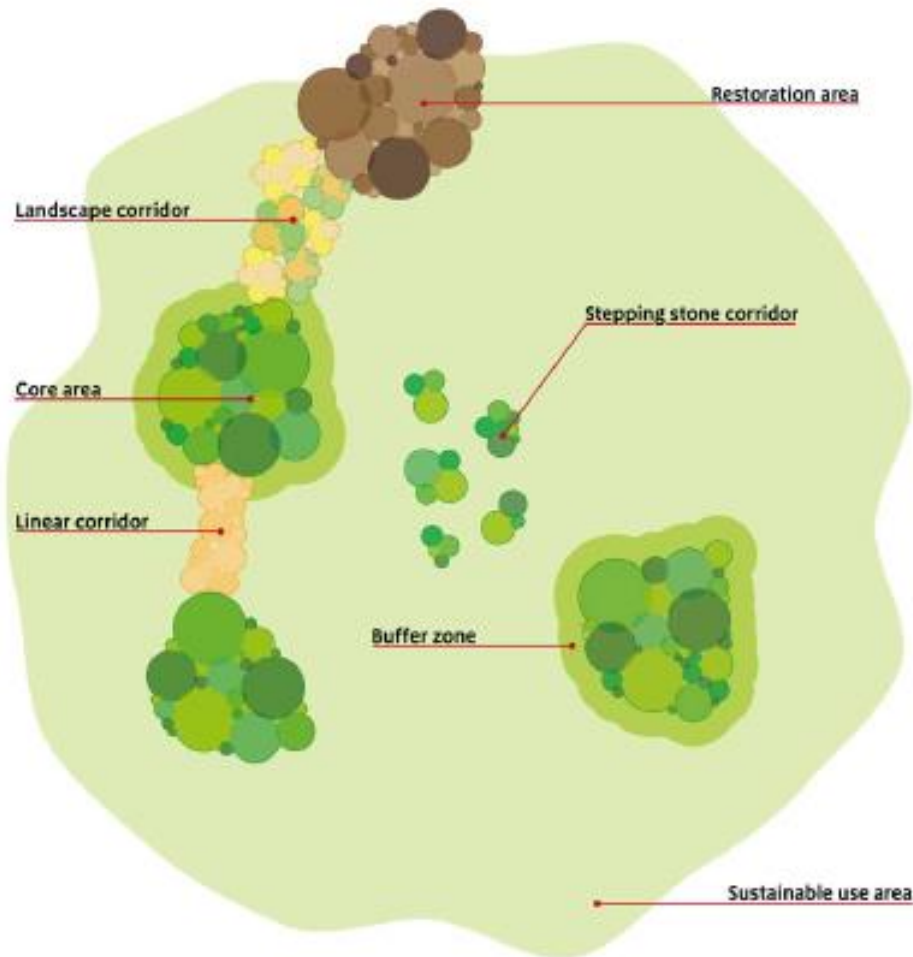
Minerals & Waste Development Framework: Somerset Minerals Plan



SOMERSET

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# So what is a coherent, resilient ecological network? How will we know if we've got one?



Features of ecological networks (from Lawton et al, 2010)



# County Minerals

## Plan review:

### Preferred Options Consultation to Mar 2013

“The delivery of Preferred Policy SMP5 should be informed by current work on the Mendip Hills Ecological Network, which is being undertaken by Somerset Wildlife Trust’s Living Landscape team in conjunction with Somerset County Council as part of the new requirement in National Policy to assess existing and potential components of ecological networks”.



The area considered for  
landscape scale  
restoration is NCA 141



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Going back to Lawton:

Lawton didn't reveal the full scale of the challenge. **Bigger, better, more and joined-up?**

**It was hard enough stopping wildlife habitats getting smaller, worse, fewer and more isolated.**

Ecological networks depend on a detailed knowledge of species' needs.

We will probably never know enough detail about every species' needs

Modelling the networks maybe the only practical way available to us



# County Minerals Plan review:

## Restoration Topic Paper – focused on NCA 141



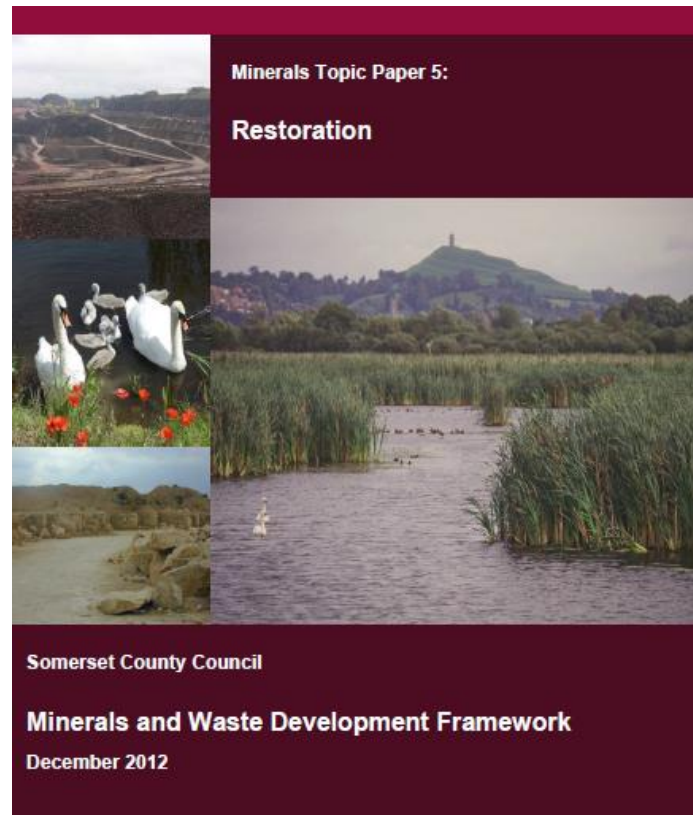
### MINERALS LOCAL PLAN

#### Topic Paper 5: Restoration

#### Annex

#### Identifying and Mapping the Mendip Hills Ecological Network

April 2013



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WESTON-SUPER-MARE

CHEDDAR

RADSTOCK

WELLS

GLASTONBURY

FROME

## Legend

-  River Core Areas
-  River Corridors
-  Woodland Core Areas
-  Woodland Stepping Stones
-  Woodland Matrix Habitats
-  Mendip Hills NCA 141
-  Active quarries



Broadleaved Woodland and Riverine Ecological Networks

Mendip Hills Living Landscape

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WESTON-SUPER-MARE

CHEDDAR

RADSTOCK

WELLS

FROME

GLASTONBURY

## Legend

- Heathland and Acid Grassland Core Areas
- Heathland and Acid Grassland Stepping Stones
- Heathland and Acid Grassland Matrix Habitats
- Grassland Core Areas
- Grassland Stepping Stones
- Grassland Matrix Habitats
- Mendip Hills NCA 141
- Active quarries



## Heathland and Grassland Ecological Networks

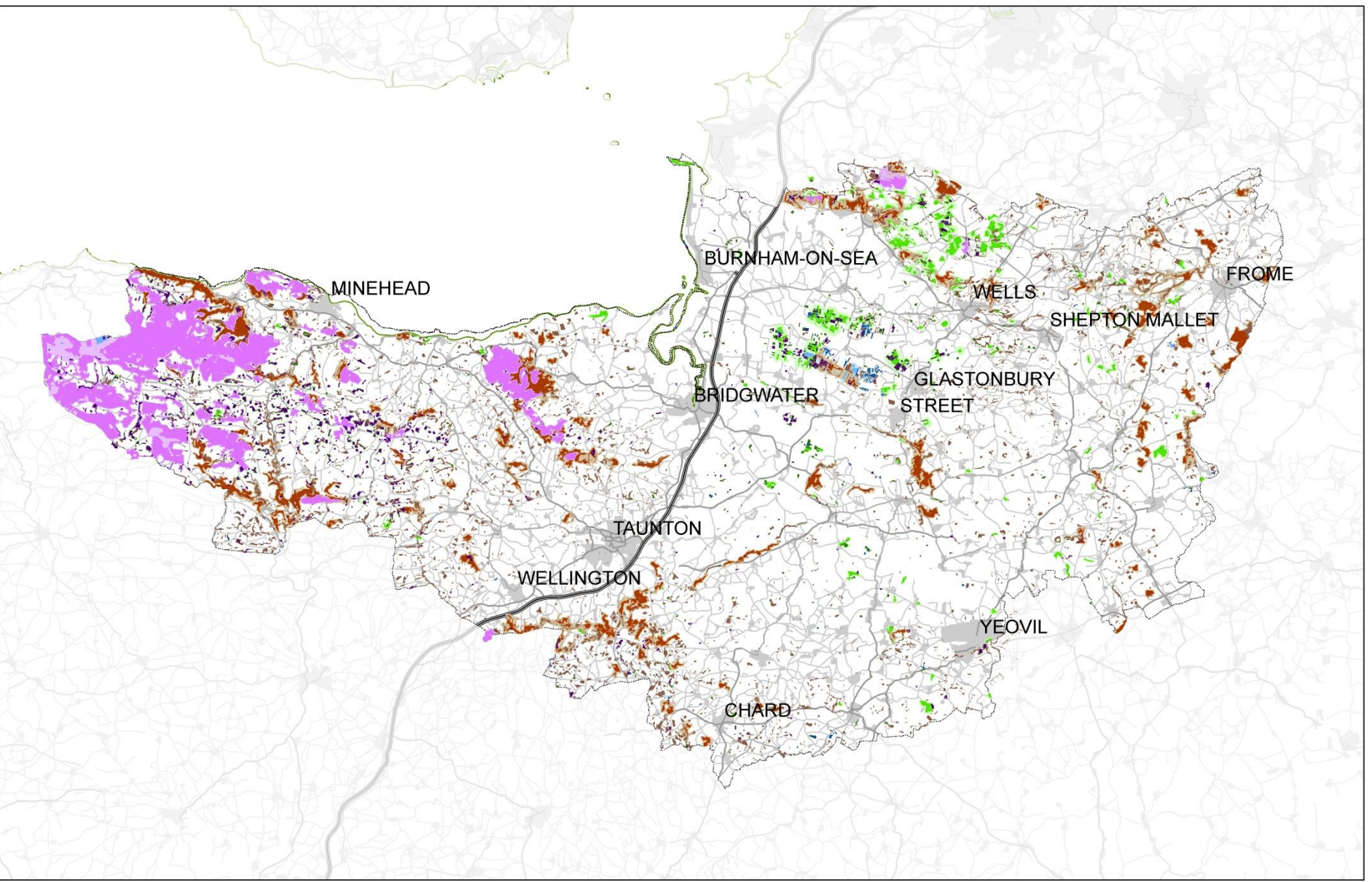
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Ecological networks

Mendip Hills Living Landscape

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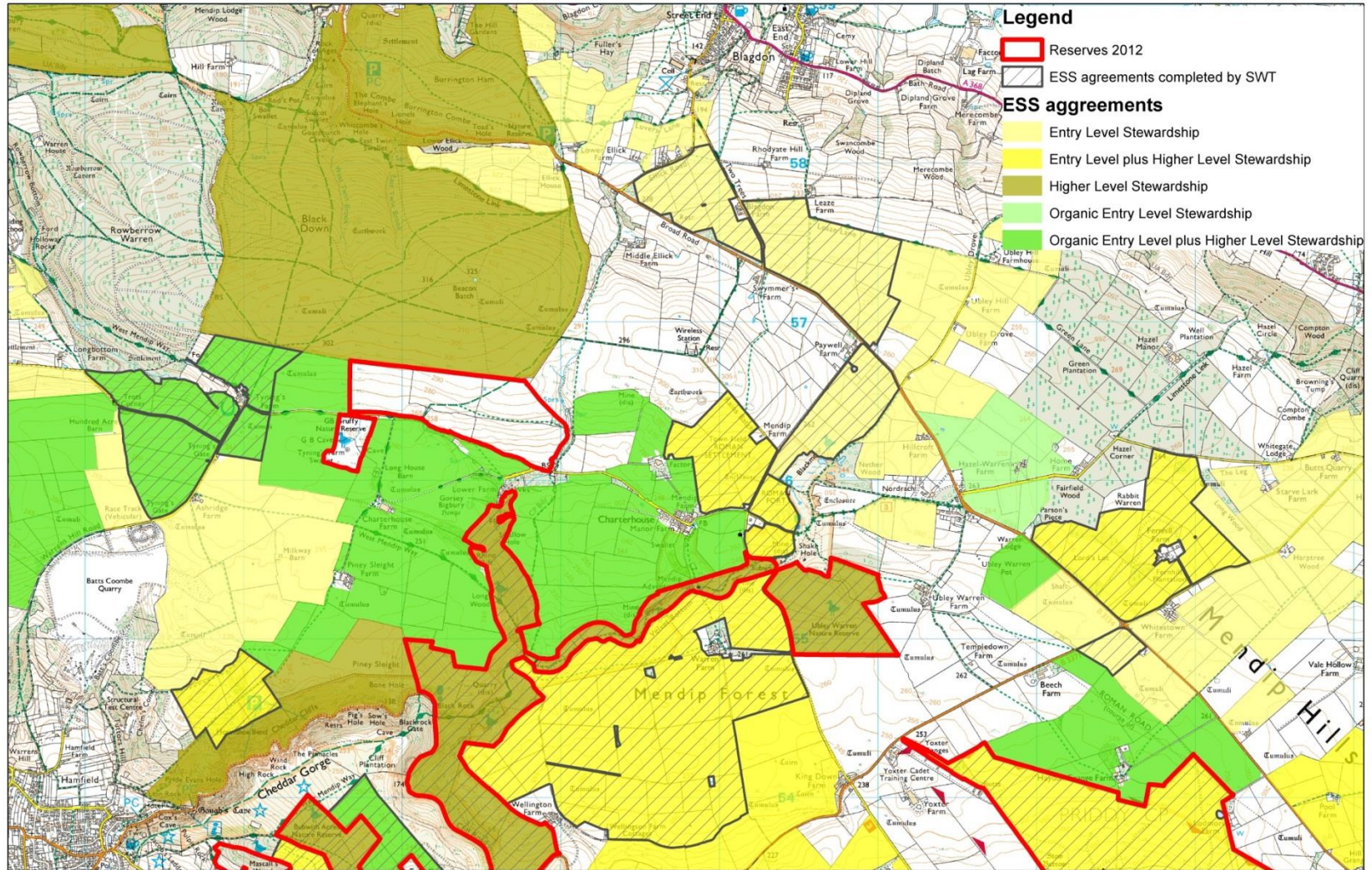


We are using the network maps in other ways: with Local Planning Authorities to inform emerging local plans



Protecting **Wildlife** for the Future

# We are using the network maps in other ways: to target agri-environment schemes & land management advice





# Seeds for Change

High quality grass forage trials on Mendip

4 trials on three farms

Sown and managed as temporary grass leys

Cut twice a year for silage

A resting period to allow for flowering herbs (3-5 weeks)

A control seed mix (the farmer's usual)

A test seed mix – 5 grasses, 7 legumes, 5 herbs



# Seeds for Change

Monitoring establishment of seed mix

Do the various species in the mix germinate and persist?

Measuring forage quality:

Digestibility

Crude protein

Metabolisable energy

The mix can be tailored to suit

It has been very successful in the trials (one farmer has added 30 acres without ELS payments)

Available as EK21

SEO 3: Conserve and sustainably manage the rural agricultural landscape and enhance the network of nationally and internationally important sites and semi-natural habitats associated with the distinctive geology and topography to create a coherent and resilient ecological network, enabling ecosystems to adapt to climate change and for the benefits to biodiversity, water flow, water quality and protection of the aquifer, soil quality, regulating soil erosion, rural heritage and culture.

## ... continued from previous page

- Enhancing signage, paths, parking and other facilities to minimise congestion, erosion and other problems in key heathland areas, as well as continuing to provide information to help visitors to understand the importance and vulnerability of the heathland areas, especially the Blackdown, Charterhouse and Priddy Mineries areas.
- Encouraging the conversion of suitable plantation and marginal grassland areas to heathland to strengthen the currently very fragmented heathland network.
- Protecting, managing and expanding the lowland calcareous grassland network throughout the NCA which has declined under agricultural improvement, or has been prone to neglect, undergrazing and scrub encroachment, managing and consolidating through controlled grazing regimes and scrub control.
- Enhancing the ecological permeability of the landscape through maintaining and encouraging areas of semi-natural grassland within designed parkland, promoting sympathetic management of species-rich grassland on road verges and tracks, and encouraging the targeted uptake of agri-environment scheme options that promote legume and herb-rich swards for silage production on temporary grasslands on the plateau as a means of increasing the permeability of intensive agricultural land for wildlife.
- Encouraging continuation of traditional hay meadow management while preserving traditional breeds, rare species and characteristic habitats; protecting soil structure, carbon content and permeability; maintaining the purpose and function of typical landscape features such as walls, hedges, traditional farmsteads and field barns; and protecting water quality. Environmental schemes and support for marketing of local farm produce could play an important role.
- Working with farmers to reduce sources of diffuse agricultural pollution into the groundwater and watercourses, and run-off and soil erosion into watercourses, for example by ensuring that they have adequate access to soil analysis to enable the calculation of appropriate levels of fertiliser inputs to reduce energy wastage and benefit water quality, and maintaining appropriate stocking levels and tillage regimes.
- Encouraging the maintenance and restoration of drystone walls and hedgerows across slopes to slow run-off and reduce soil erosion.
- Encouraging farmers to maintain or improve soil condition of cultivated soils through incorporation of appropriate levels of organic matter, increasing water retention and infiltration but not causing groundwater pollution.
- Continuing to ensure that conditions are applied to quarrying and any other mineral or gas extraction, such as fracking, to minimise impacts on groundwater hydrology, including that of the Bath hot springs, a significant tourist attraction in the neighbouring Cotswolds NCA.



## Some next steps:

Use the NCA 141 ecological networks to target (N)ELMS availability and Ecological Focus Areas.

Partnership approaches as a delivery vehicle for NCA statements of opportunity

Establish as a locally determined Nature Improvement Area (NIA)

# NCA 141: Mendip Hills

## Informing Landscape-scale initiatives

Part Two

**Sarah Jackson**

**Mendip Hills AONB unit**



**Mendip Hills AONB Partnership**



# **Mendip Hills Area of Outstanding Natural Beauty (AONB)**

## **Mendip Hills AONB Partnership**

**Local authorities (B&NES, N.Som, SCC, Mendip, Sedgemoor)**

**Natural England**

**National Trust**

**NFU/CLA**

**Somerset and Avon Wildlife Trusts**

**Somerset and Avon Community Councils**

**Parish Council reps**

**Mendip Society/CPRE**

**Statutory AONB Management Plan 2014-19 (to be adopted)**

**Delivery Plan 2014-19**



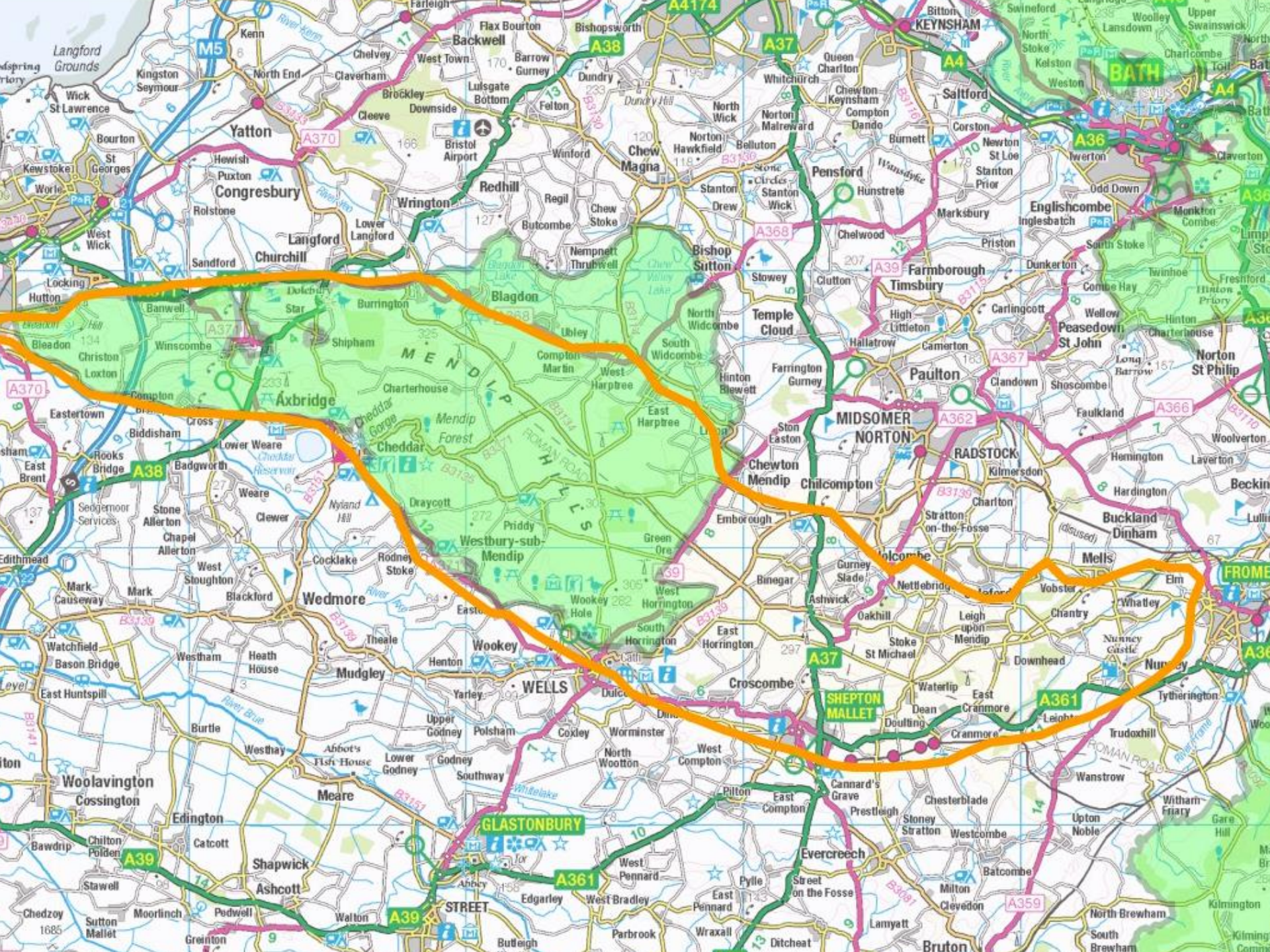
**Mendip Hills AONB Partnership**





## Mendip Hills AONB Partnership





# Relationship between NCA(s) and AONB Management Plan

Both NCAs reference **Mendip Hills AONB Management Plan 2009 -2014 objectives and actions**

**Statements of Environmental Opportunity** incorporated into revised AONB Plan context and objectives 2014-19

**Ecosystems services** – incorporated into Management Plan 2014-19:

## **National importance;**

- Sense of place/inspiration
- Sense of history
- Tranquility
- Recreation
- Biodiversity
- Geodiversity

## **Regional importance:**

- Food provision
- Water availability
- Regulating water quality
- Regulating soil erosion



**Mendip Hills AONB Partnership**



# Relationship between NCAs and AONB Management Plans

## Environmental Information:

NCA Key facts and data

'Framework for monitoring Environmental Outcomes in protected landscapes' - Natural England data provided to AONBs/National Parks

**Special Qualities** – referenced in NCA summary, Statements of Environmental Opportunity, description ..

**Special Qualities** – 12 listed as Statement of Significance - focus of AONB Management



Mendip Hills AONB Partnership



# Mendip Hills NCA Landscape scale initiatives

Locally determined Nature Improvement Area  
Mendip Rocks! Framework  
Mendip Rocks! Festival  
Quarry Faces

Mendip Hills Fund



Mendip Hills AONB Partnership



# Monitoring

## **AONB Management Plan –**

AONB Delivery Plan

Annual Review

Framework for monitoring Environmental Outcomes in protected landscapes

State of the AONB report

**NCA –** Use as a decision making tool  
State of the NCA – potential Nature Improvement Area (NIA)?



Mendip Hills AONB Partnership

