



**Blackdown Hills**  
Area of Outstanding Natural Beauty

# Blackdown Hills AONB Nature Recovery Plan consultation

8 April 2021



# Purpose of meeting

- **Bring partners up to speed** with progress on the Nature Recovery Plan for the Blackdown Hills AONB
- Discuss the evidence findings to date including the State of Nature report (part of a **Decision Support Tool**) and what the opportunity maps are highlighting
- **Discuss the 'fit' with other plans & strategies**, including emerging processes that will refine and formalise our approach in the future (e.g. Local Nature Recovery Strategies)
- **Debate the visualisations-** 'direction of travel'
- Draw together the mapping, report and visualisation threads to **co-create a rough plan of action** that is deliverable and highlight outline Nature Recovery Areas (could be sub-catchments)- to form a focus of effort and resources going forwards
- **Links** to neighbouring AONBs and other initiatives
- Agree **next steps**

# Summary

- Context, background, purpose, fit, scope
- Special qualities
- State of Nature- habitats & species
- Opportunity mapping
- Strategic fit with other plans & strategies
- Visualisations
- Monitoring & evaluation

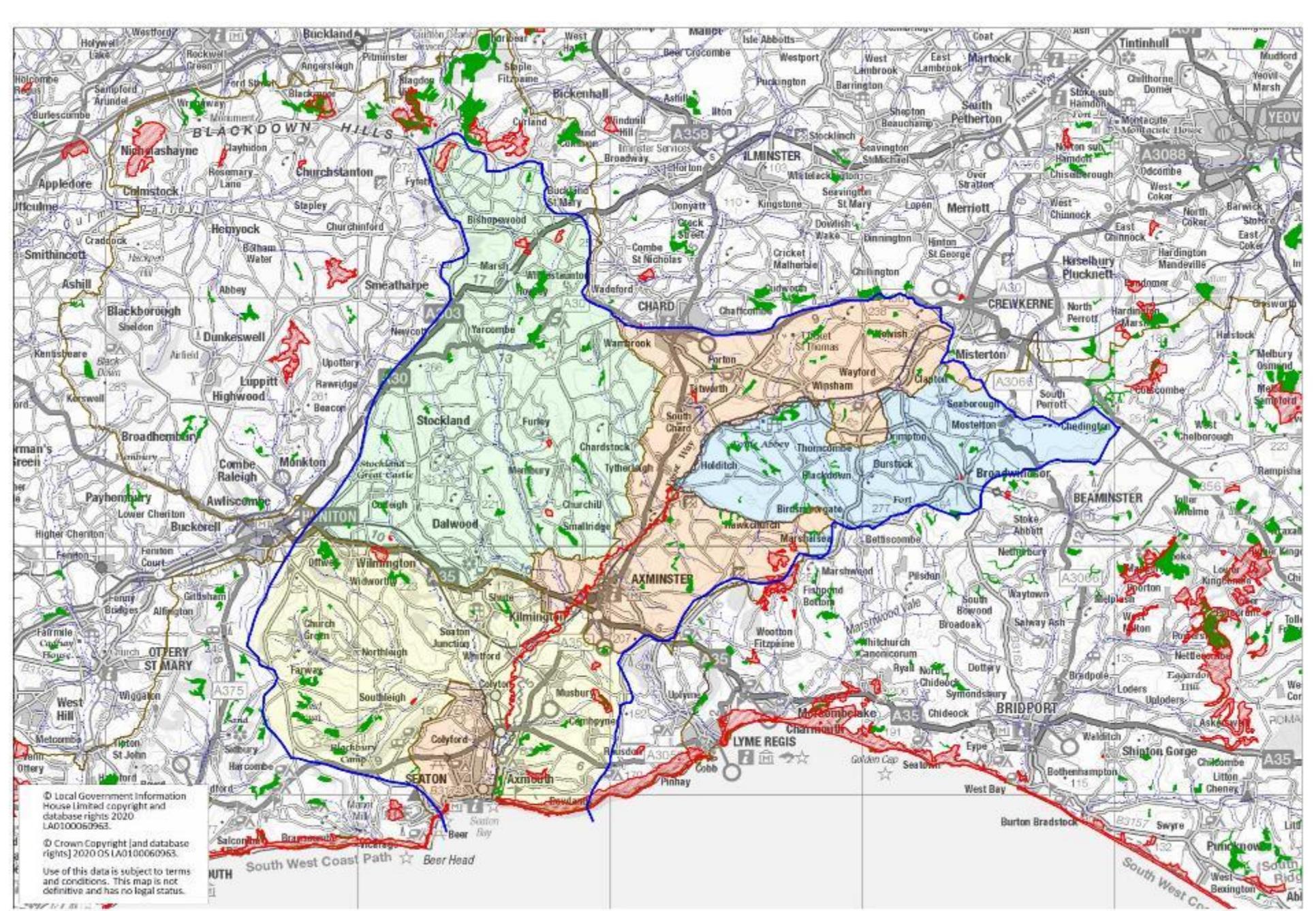
# Colchester Declaration



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1. Based on 25 YEP targets, but also applies to 30 by 30
2. AONB Nature Recovery Coordinator, in partnership with Natural England
3. Nature Recovery Plans being undertaken in collaboration using a shared framework
4. Species workshop with Natural England (14/9/2020)
5. Reaching out to diverse audiences workshop (7/10/2020)
6. Continuing conversations and development of the five national pilots
7. Plugging into NRN (including via the National Partnership) and LNRS processes

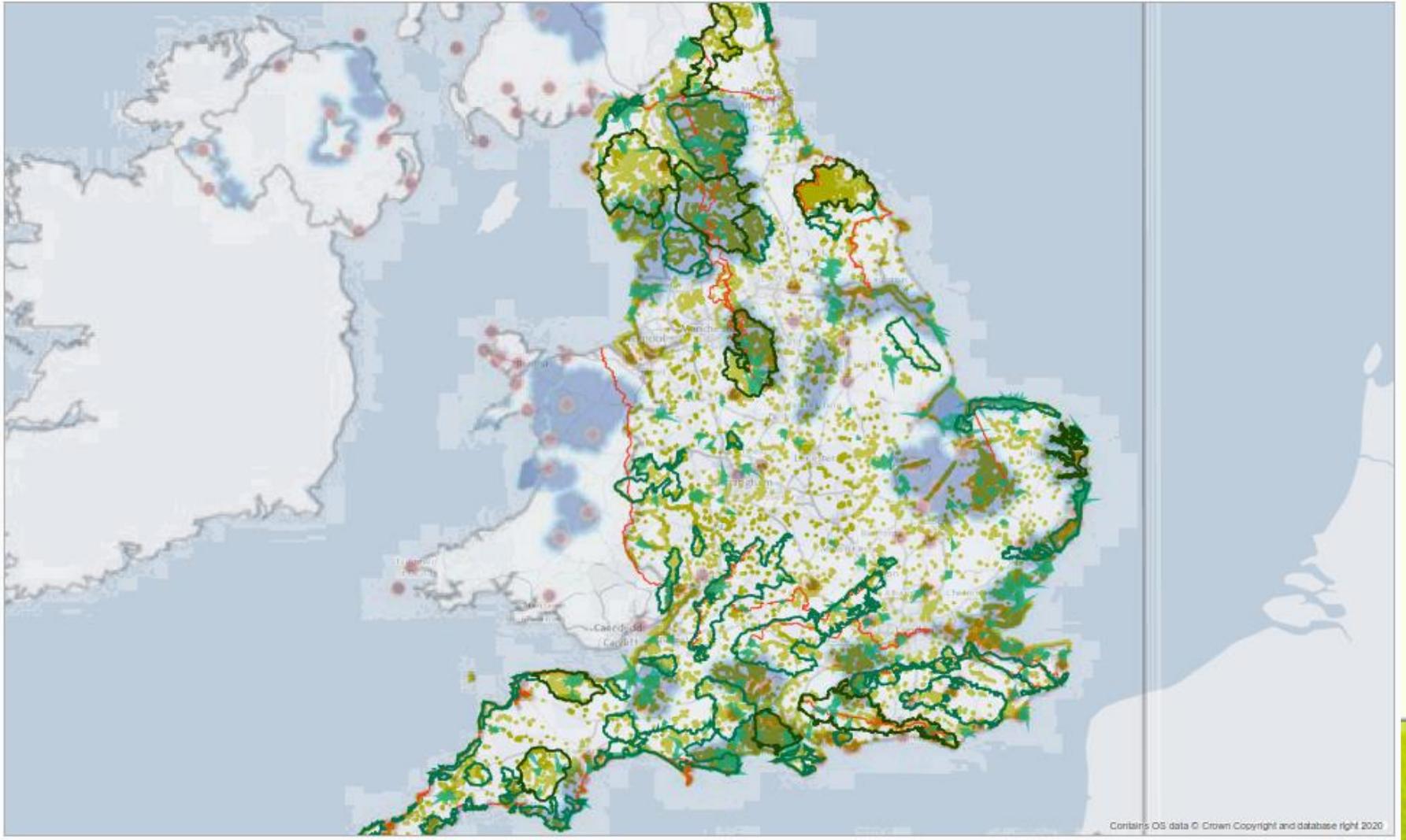






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# Woodland cover options tool (Jon Burgess, FC)



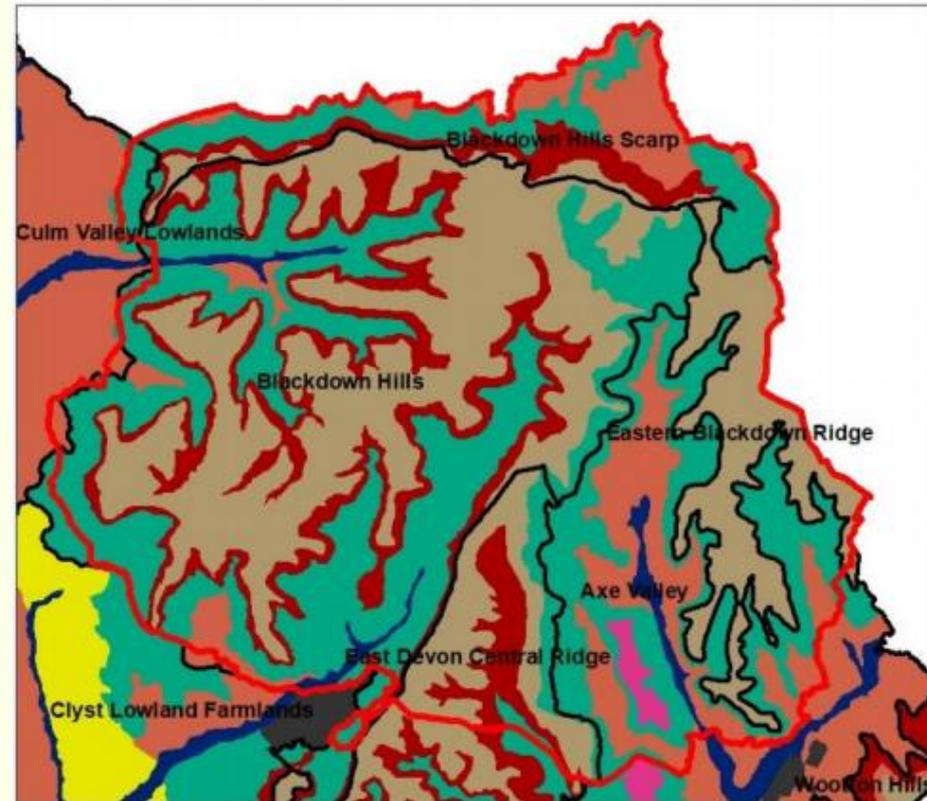
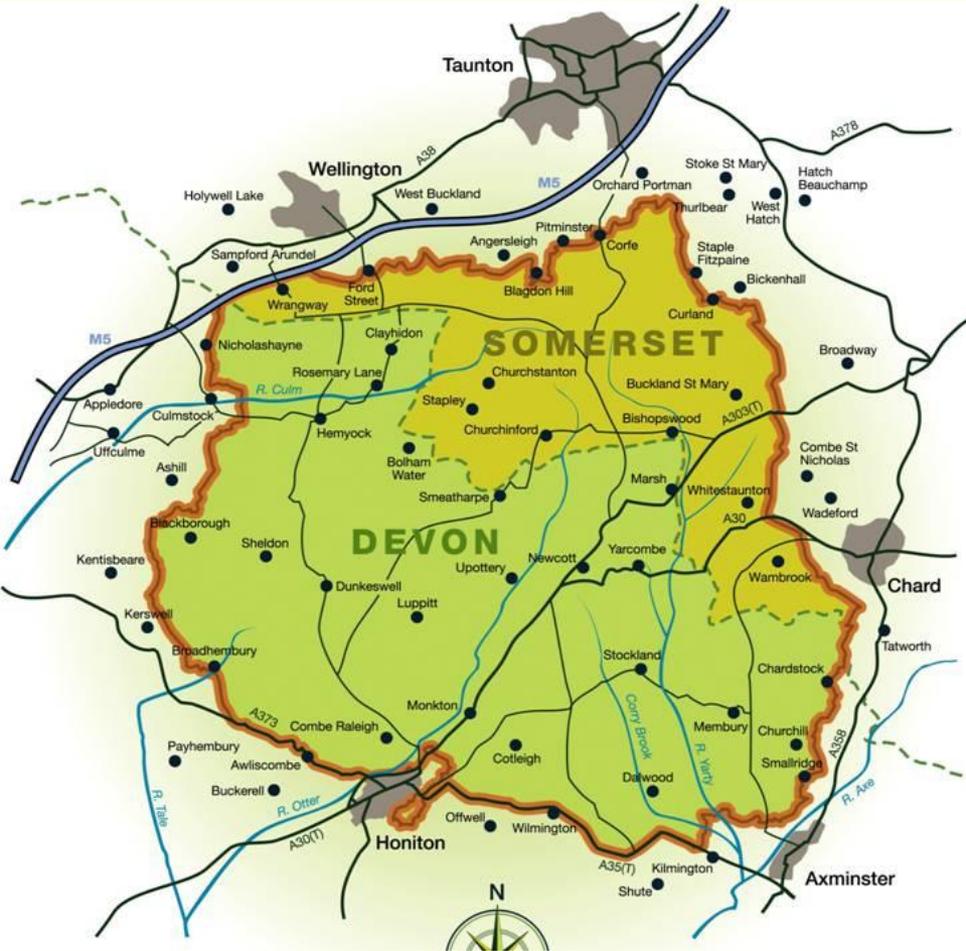
# Context and fit

- South West AONBs collaborative approach, using the national framework for Nature Recovery Plans
- Add value to the statutory Blackdown Hills AONB Management Plan (2019-24), integrate at next review that starts 2022
- Integrated approach with climate change mitigation & adaptation, inclusion/ diversity and environmental land management
- Apply Lawton principles especially ‘at scale’
- Timescales for working Nature Recovery Plan- July
- County context and fit- Somerset & Devon partners- including State of Devon/ Somerset, statutory LNRS, NRN work in county and nationally



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## Landscape Character Types

### LCT\_NO

- 1A: Open inland planned plateaux
- 1E: Wooded ridges and hilltops
- 2A: Steep wooded scarp slopes
- 3A: Upper farmed and wooded valley slopes
- 3B: Lower rolling farmed and settled valley slopes
- 3C: Sparsely settled farmed valley floors
- 3E: Lowland plains
- 7: Main cities and towns



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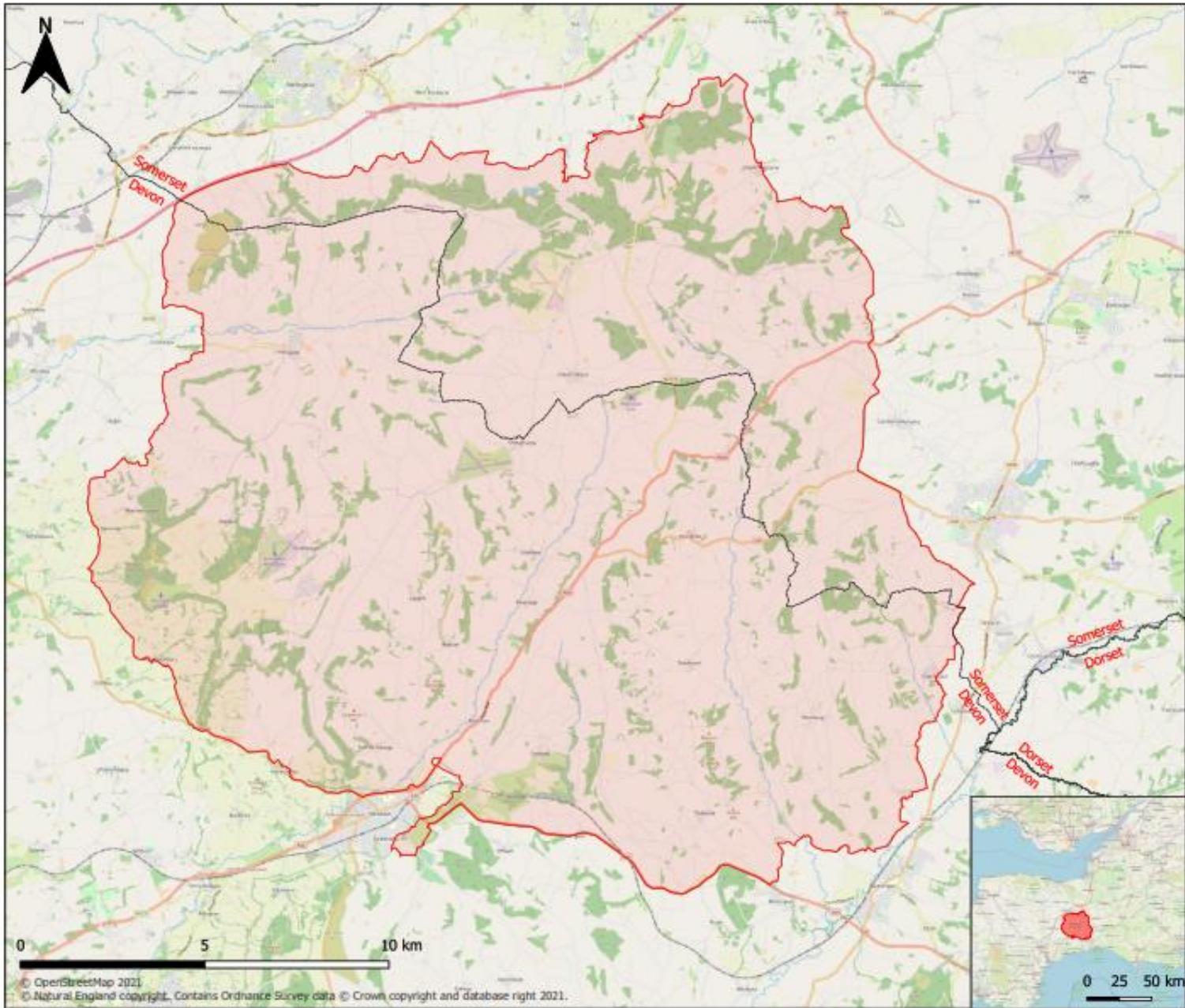
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# Blackdowns AONB

AONB Nature Recovery Plans

## Legend

- Study Area
- Blackdowns AONB
  - County boundary

The extent of data mapped is limited to the AONB boundary as a result of budget constraints.



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# Headlines

## Headlines:

- Total area of AONB= 37,000ha
- 14% designated/ non-designated for nature
- Of that, 2% SSSI, 1 SAC (Quants)
- c12% woodland
- 692 farm holdings





# Headlines- quantity

Priority habitat type (natural capital assets)	Area (hectares)
*TOTAL area of priority habitat*	2904
Lowland calcareous grassland	6
Traditional orchards	50
Lowland dry acid grassland	19
Lowland meadow	276
Lowland heathland	45
Purple moor grass & rush pasture	234
Wood pasture & parkland	127
Lowland deciduous mixed woodland	500
Upland oakwood or mixed ashwood	7

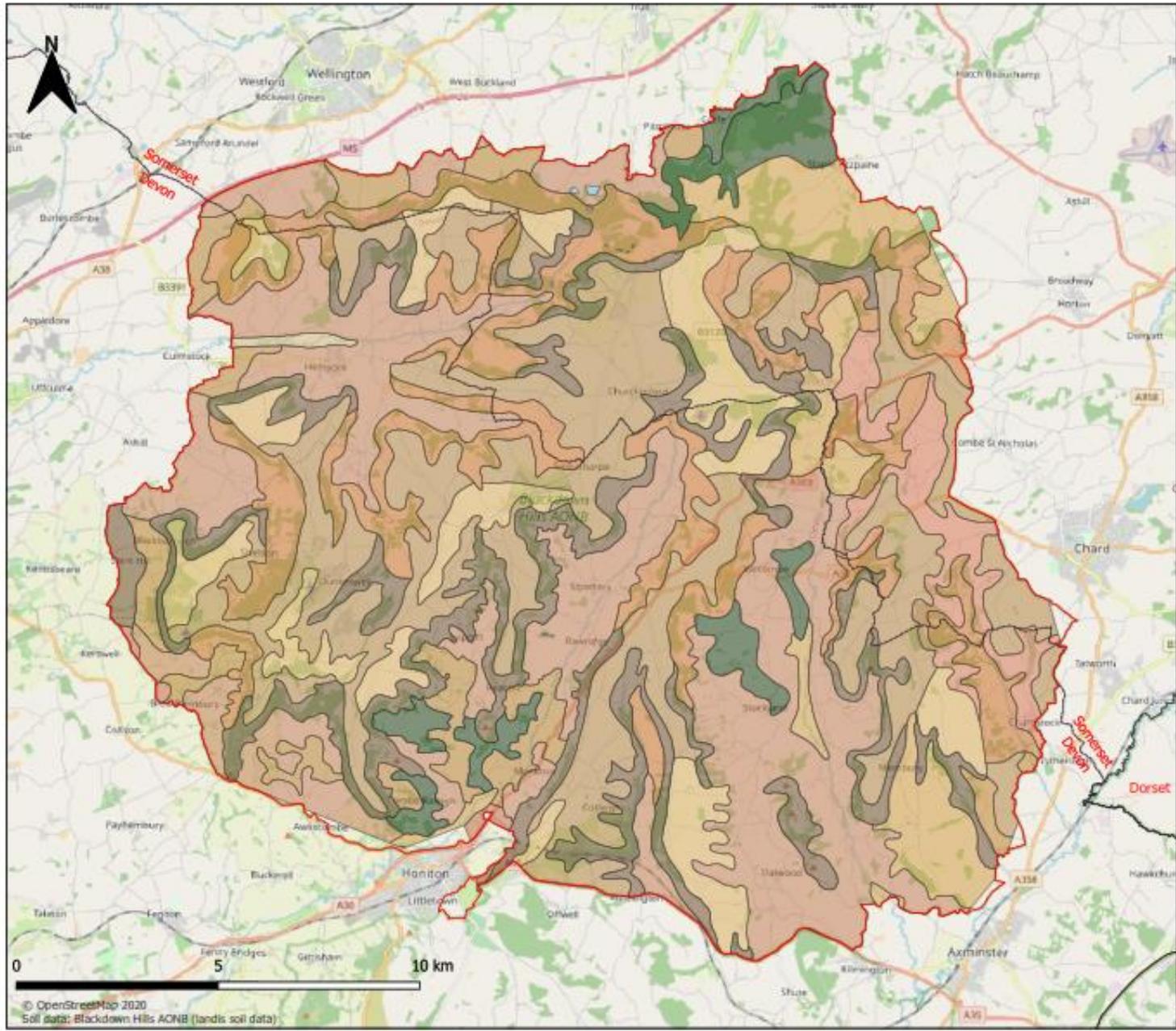
# Headlines- woodland (12%)



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Woodland type	Area (hectares)
Coniferous	1169
Broadleaf woodland	3092
Other woodland	318





# Blackdowns AONB

## Distribution of soil types within the Blackdowns AONB

AONB Nature Recovery Plans

### Legend

- Soil description**
- Deep clay
  - Deep loam
  - Loam over gravel
  - Deep silt to clay
  - Deep red loam to clay
  - Deep loam to clay
  - Seasonally wet loam to clay over red shale
  - Seasonally wet silt to clay over shale
  - Seasonally wet deep clay
  - Seasonally wet deep silty to clay
  - Seasonally wet deep silt
  - Seasonally wet deep peat to loam

### Study Area

- Blackdowns AONB
- County boundaries

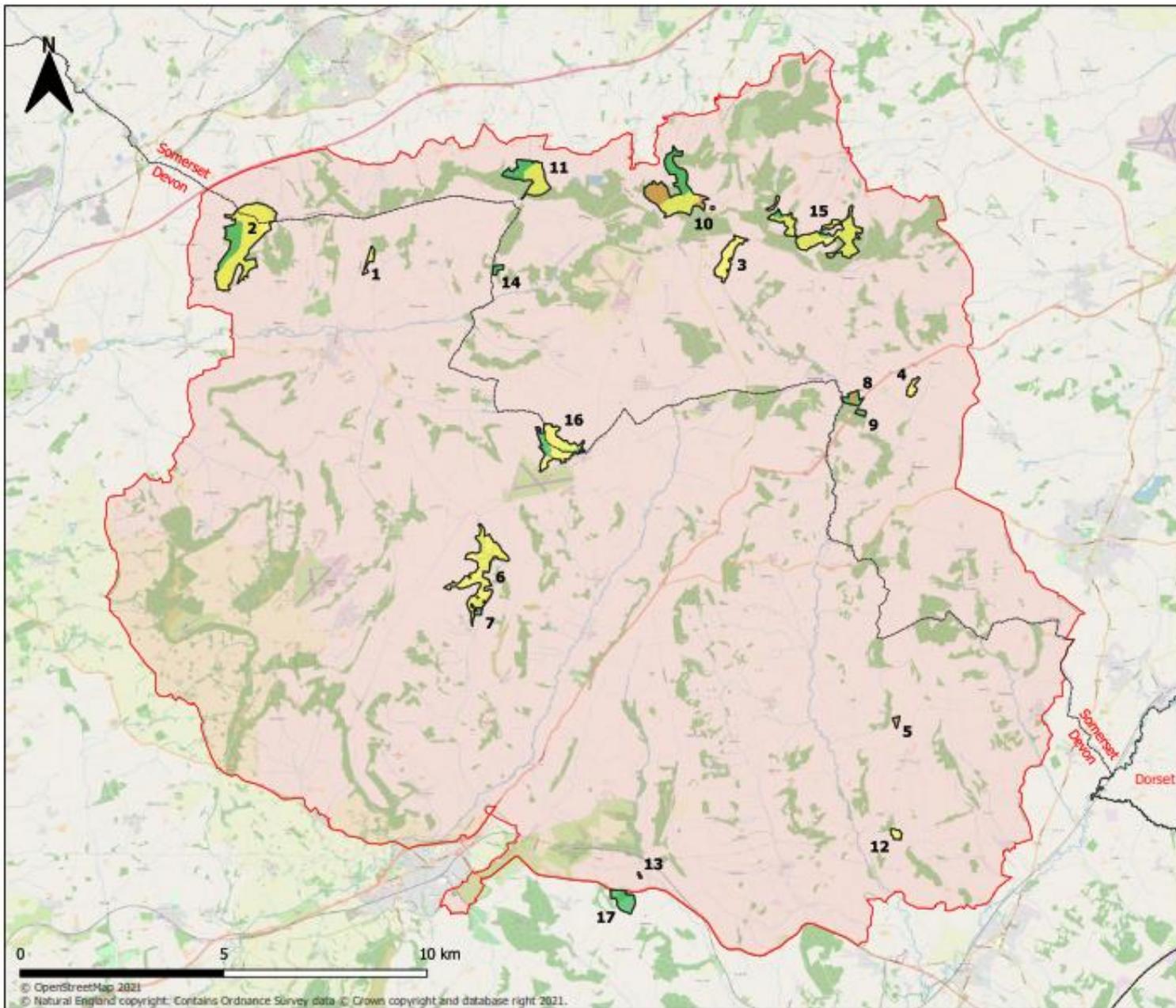
Soil types classified using the National Soil Map and Soil Classification guide (Cranfield University 2004)



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Soil data: Blackdown Hills AONB (lands soil data)



## Blackdowns AONB

Condition assessment of  
Sites of Special Scientific  
Interest within the  
Blackdowns AONB

AONB Nature Recovery Plans

### Legend

Condition of Sites of Special  
Scientific Interest

- Favourable
- Unfavourable recovering
- Unfavourable no change

Sites of Special Scientific  
Interest

- 1 Ashculm Turbary
- 2 Black Down and Sampford Commons
- 3 Deadman
- 4 Freshmoor
- 5 Furley Chalk Pit
- 6 Hense Moor
- 7 Hense Moor Meadows
- 8 Long Lye
- 9 Long Lye Meadow
- 10 Prior's Park & Adcombe Wood
- 11 Quants
- 12 Quarry Fields Farm
- 13 Reed's Farm Pit
- 14 Ringdown
- 15 Ruttersleigh
- 16 Southey and Gotleigh Moors
- 17 Wilmington Quarry

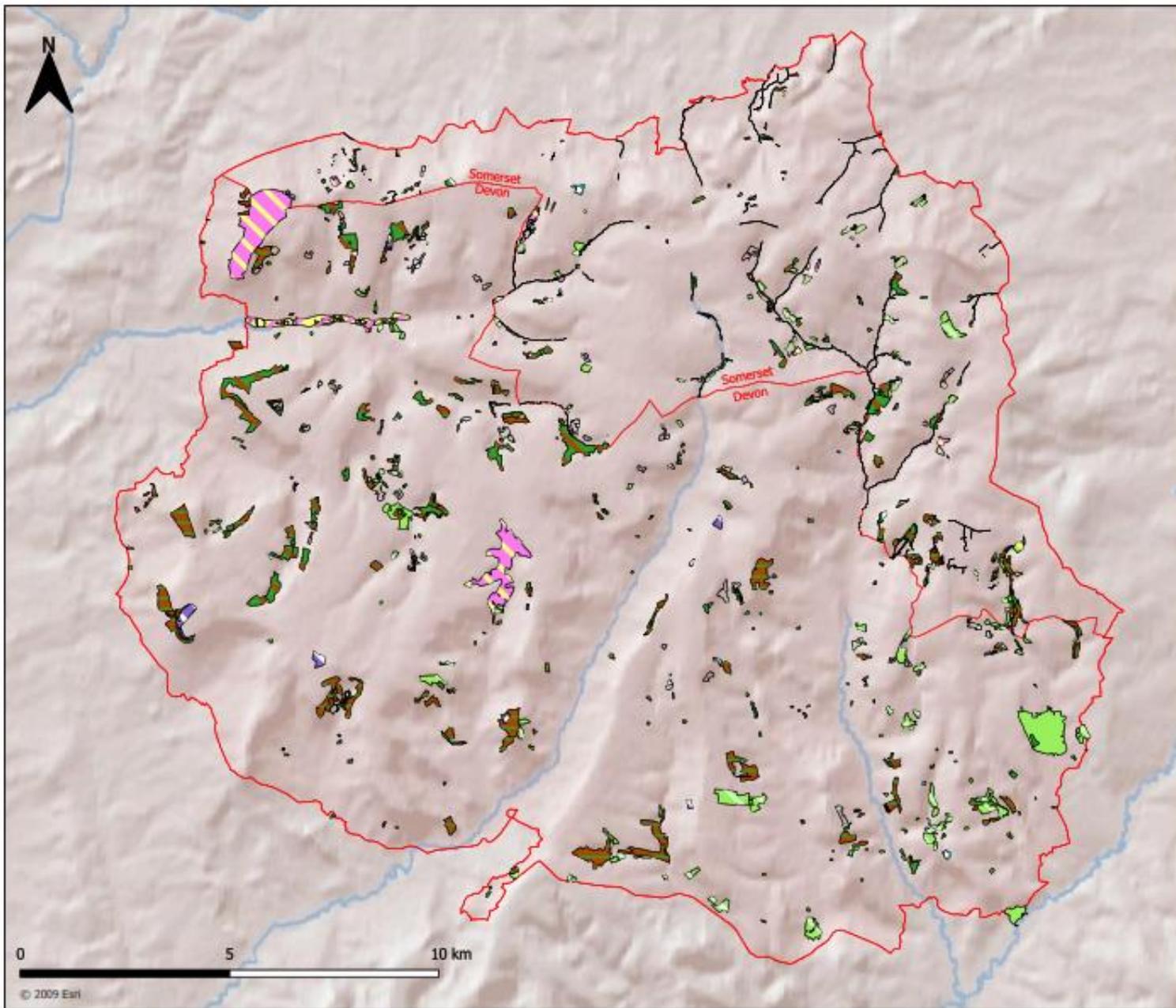
Study Area

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- County boundary



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# Blackdowns AONB

Location of priority habitats  
within the Blackdowns  
AONB

AONB Nature Recovery Plans

## Legend

### Priority Habitats

- Wet Woodland
- Purple moor-grass and rush pasture
- Parkland
- Orchards
- Lowland Meadow
- Lowland Heathland
- Lowland Calc Grassland
- Lowland mixed deciduous woodland
- Lowland dry acid grassland
- Fen
- Open Mosaic Habitat
- Coastal and floodplain grazing marsh
- Upland oakwood
- Upland mixed ashwoods
- Hedgerow
- Arable field margins
- Dystrophic standing water
- Rivers and streams

### Statutory Boundaries

- Counties Boundaries

### Study Area

- Blackdowns AONB



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0 5 10 km



# AONB State of Nature

Provisional findings- for discussion:

- Varied geology/ soils reflects range of habitats, (many occurring in mosaics)
- Relatively low density of SSSI/SAC whereas varied priority habitat is well distributed, albeit fragmented
- This is our baseline
- Quality of habitat? (as well as quantity)
- Gaps? Hedgerow network, data gaps

# Species

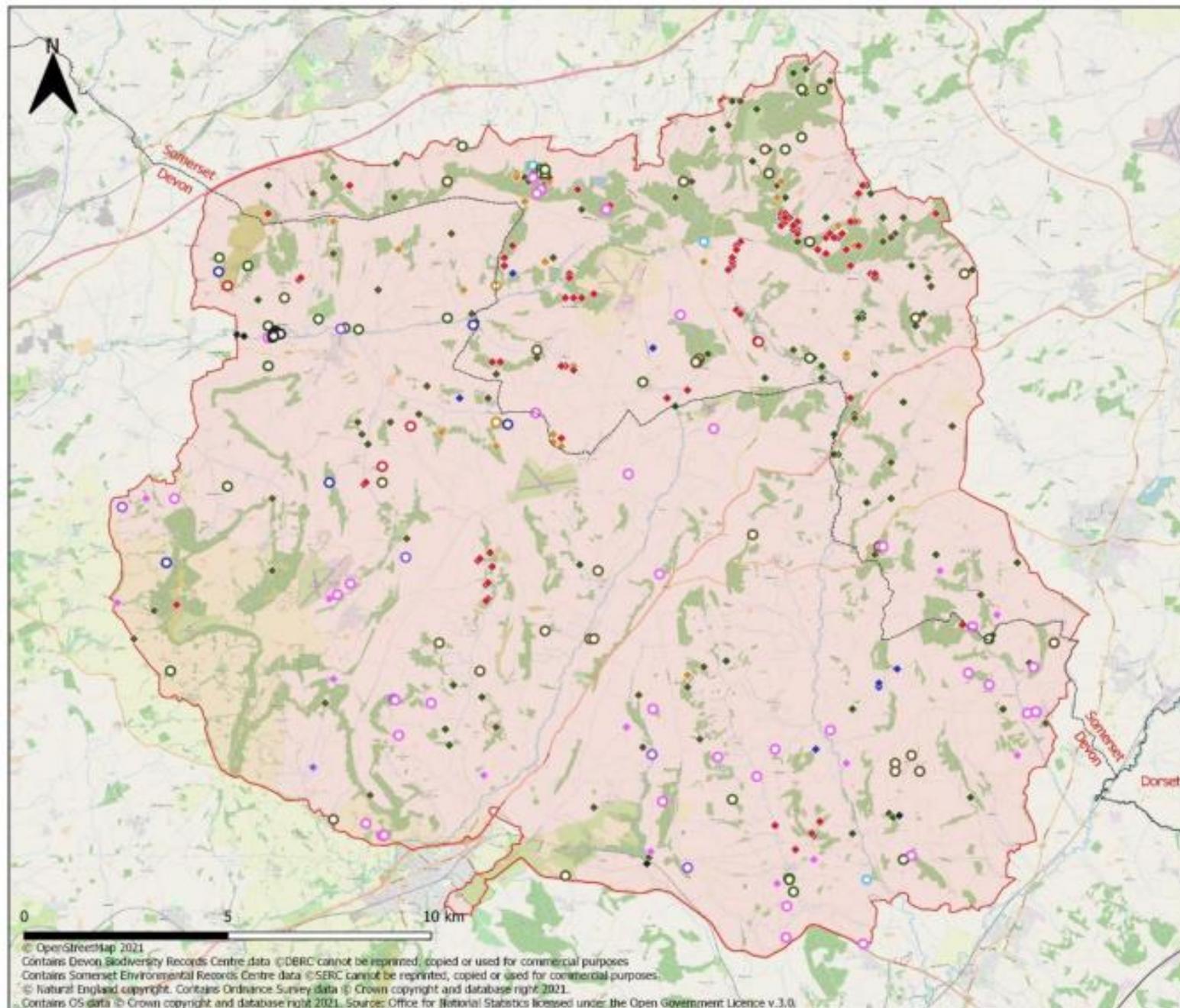
‘Champion species’ have been identified across the AONBs, mirroring the Devon Special Species methodology:

- hazel dormouse
- horseshoe bat (2 sps) & bechstein’s
- white-clawed crayfish
- brown hairstreak butterfly
- springline mire invert assemblage (marsh fritillary, double line moth, narrow bordered bee hawkmoth, small pearl bordered fritillary)
- beaver!



Apply Favourable Conservation Status nationally (and for habitats)

**Do you support this list? Collate survey effort/ gaps**



# Blackdown Hills AONB

Distribution of champion species, filtered by the date of collection, within the Blackdown Hills AONB

AONB Nature Recovery Plans

## Legend

### Champion Species

- 2010 to Present**
- White-clawed freshwater crayfish
  - Greater horseshoe bat
  - Double line moth
  - Marsh fritillary
  - Bechstein's bat
  - Small pearl-bordered fritillary
  - Hazel dormouse
  - Lesser horseshoe bat
  - Brown hairstreak
- 2009 and Older**
- White-clawed freshwater crayfish
  - Greater horseshoe bat
  - Small pearl-bordered fritillary
  - Marsh fritillary
  - Hazel dormouse
  - Double line moth
  - Lesser horseshoe bat
  - Brown hairstreak

### Study Area

- Blackdown Hills AONB
- County boundary

'Champion Species' data is separated by the year in which it was collected.  
 Note: Individual champion species points may represent multiple species records



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# Strategic alignment

## Obligations:

- Environment Bill Public Body duty
- AONB Management Plan
- Colchester declaration - NRPs
- Statutory sites



# Strategic alignment

## Opportunities:

- Local Nature Recovery Strategies
- E.L.M (paying farmers for public goods)
- Protected sites strategies
- Species conservation strategies
- Biodiversity net gain
- Conservation covenants



# Strategic alignment

## **Natural Capital and the AONB:**

Nature Recovery Plan suggested priorities:

- Achieves: Colchester declaration - embeds ecosystem services approach

Recommend include natural capital for:

- Catchment level projects
- Climate measures, including carbon budgets incl trees, net zero agriculture (sustainable farming, E.L.M)
- Well-being (integration with landscape & heritage; NHLF projects)

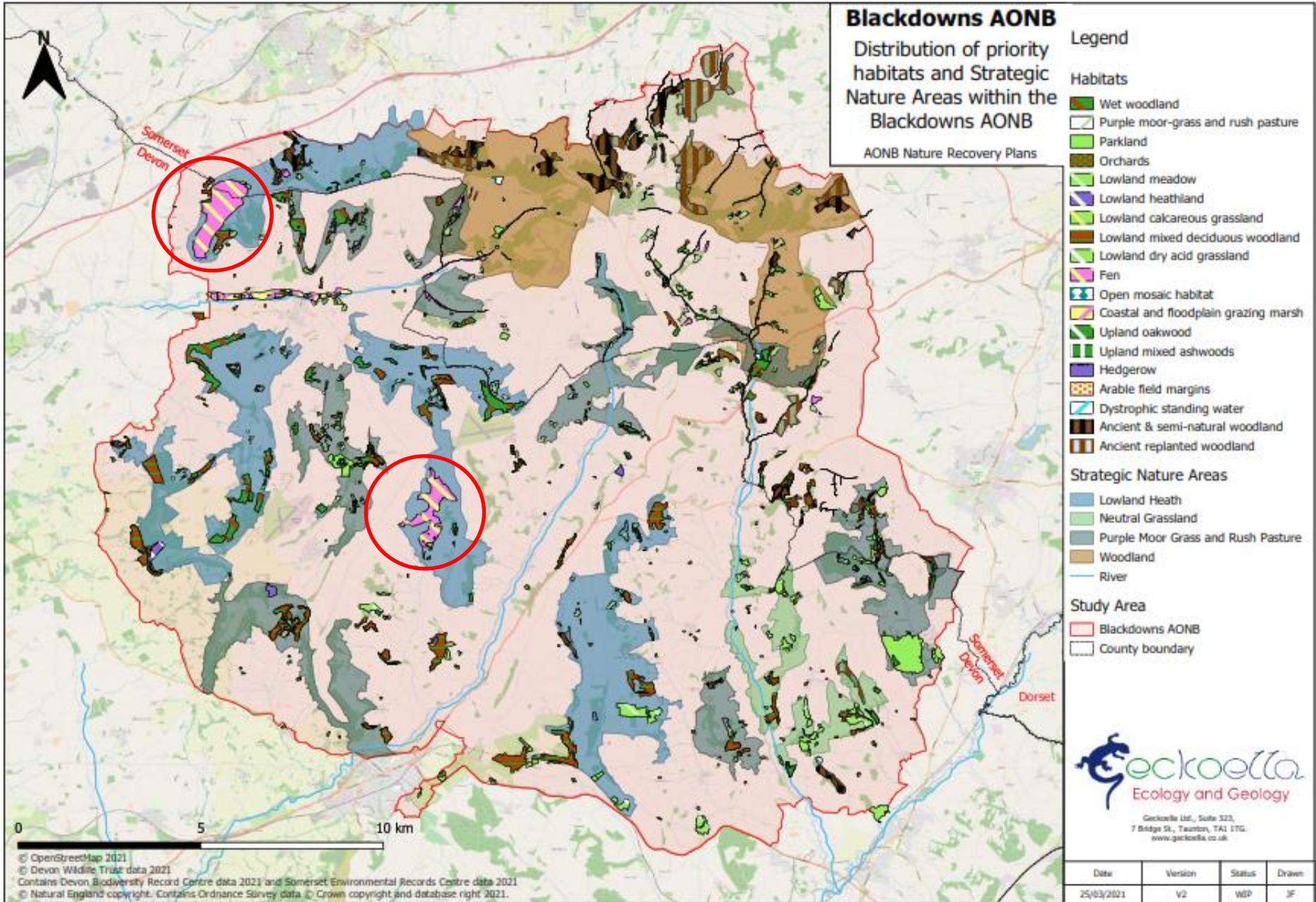
Beware 'black hole' of endless natural capital calculations based on data with uncertain ground-truth credibility.



# Opportunity mapping

## Methodology:

- Strategic Nature Areas (SNAs) have been used to define landscape-scale opportunity areas, pending full & aligned eco network/ NRN for Somerset & Devon
- 4 types: woodland, grassland, heathland, wetland
- SNA size totals: lowland heath 4,700ha, purple moor grass 3,700ha, woodland 3,300ha (don't forget mosaics!)
- Other sources of info used to help inform



# Blackdown Hills AONB

## Designated sites and Strategic Nature Areas within the Blackdown Hills AONB

AONB Nature Recovery Plans

### Legend

- East Devon AONB
- Strategic Nature Areas**
  - Lowland Heath
  - Neutral Grassland
  - Purple Moor Grass and Rush Pasture
  - Woodland
  - River

### Wildlife Sites

- Local Wildlife Sites
- County Wildlife Sites

### Geological Sites

- Local Geological Sites
- Regionally Important Geological Sites

### Special Areas of Conservation

- Quants

### Sites of Special Scientific Interest

- 1 Asholm Turbary
- 2 Black Down & Sampford Commons
- 3 Deadman
- 4 Freshmoor
- 5 Furley Chalk Pit
- 6 Hense Moor
- 7 Hense Moor Meadows
- 8 Long Lye
- 9 Long Lye Meadow
- 10 Prior's Park & Adcombe Wood
- 11 Quants
- 12 Quarry Fields Farm
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- 14 Ringdown
- 15 Rutterleigh
- 16 Southey and Gotleigh Moors
- 17 Wilmington Quarry

### Local Nature Reserves

- Otterhead Lakes

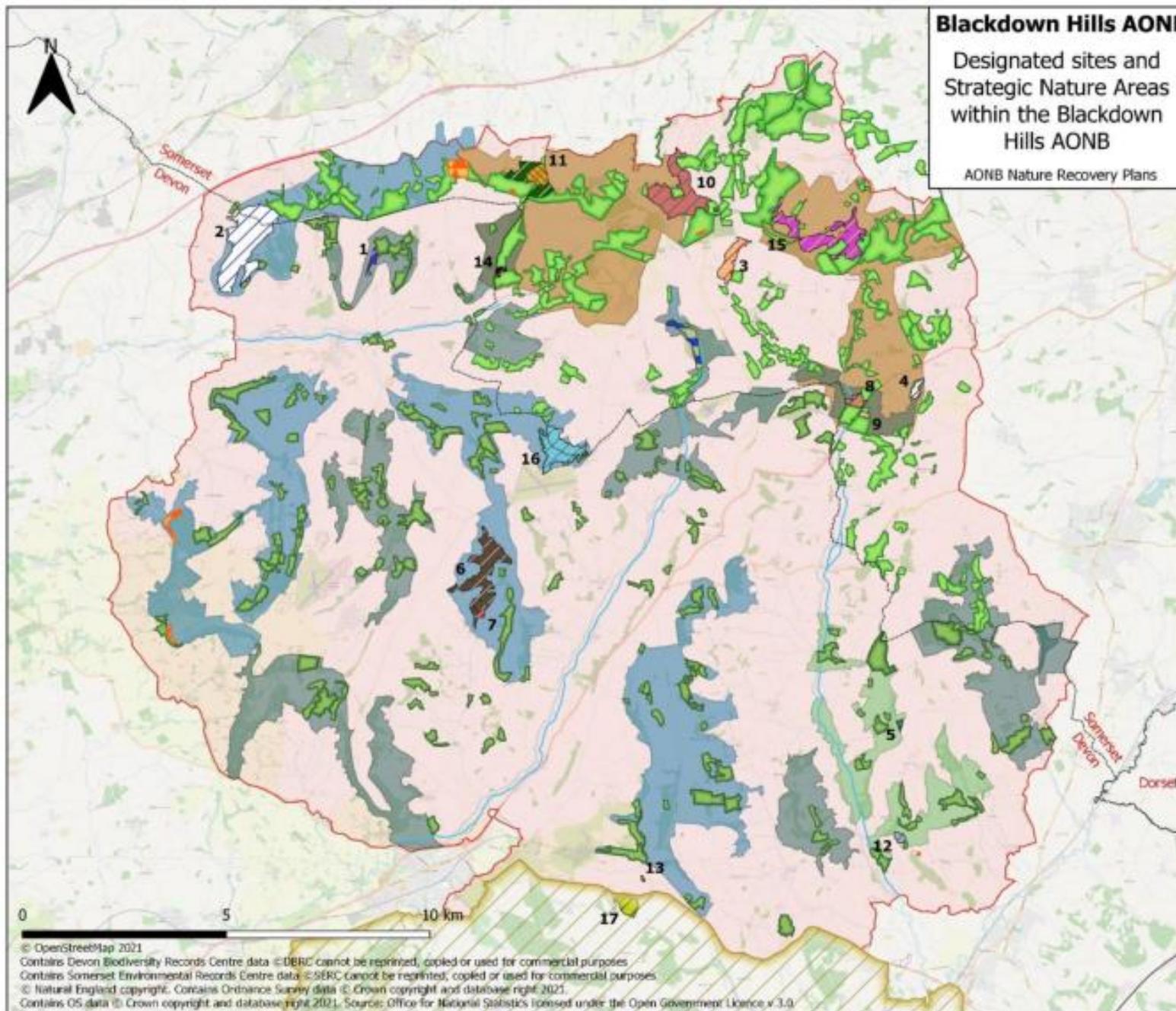
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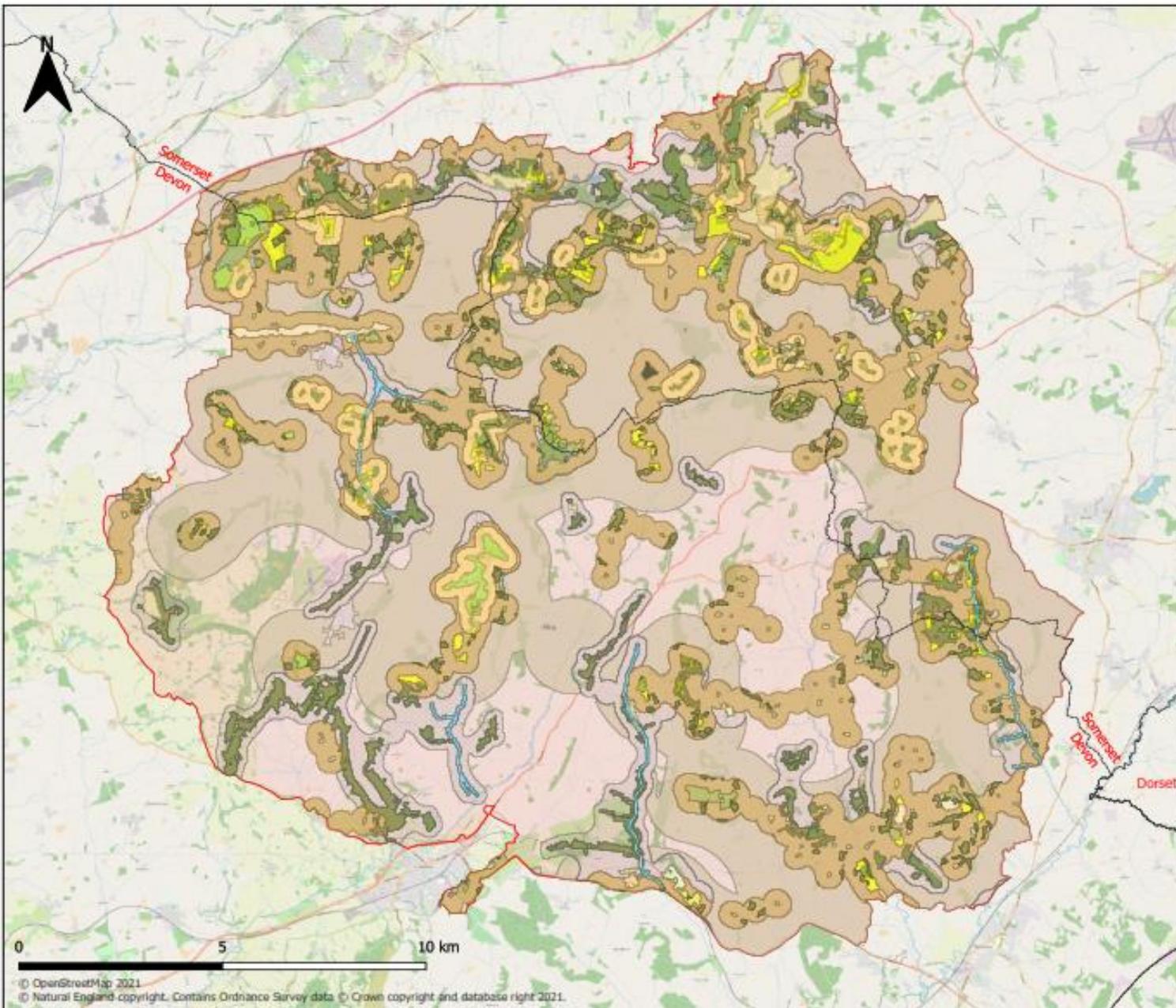


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# Blackdowns AONB

## Combined Habitat Nature Networks within the Blackdowns AONB

AONB Nature Recovery Plans

### Legend

- Habitat Nature Networks**
- Ancient woodland
  - Fragmentation Action Zone
  - Habitat Restoration-Creation
  - Lowland calcareous grassland
  - Lowland dry acid grassland
  - Lowland fens
  - Lowland heathland
  - Lowland meadows
  - Network Enhancement Zone 1
  - Network Enhancement Zone 2
  - Network Expansion Zone
  - PHI\_Other
  - Purple moor grass & rush pastures
  - Reedbeds
  - Restorable Habitat
  - Rivers
  - SSSI
  - Traditional orchard
  - Wood pasture and parkland

### Study Area

- Blackdowns AONB
- County boundary



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# Opportunity mapping

Provisional findings for discussion:

- Strong correlation between SNA and SSSI/  
county wildlife site (as you'd expect)
- There's a relatively good fit between the  
SNAs and the combined habitat nature  
networks
- (ultimately, opportunity is a key driver of  
change.....)



# Other evidence

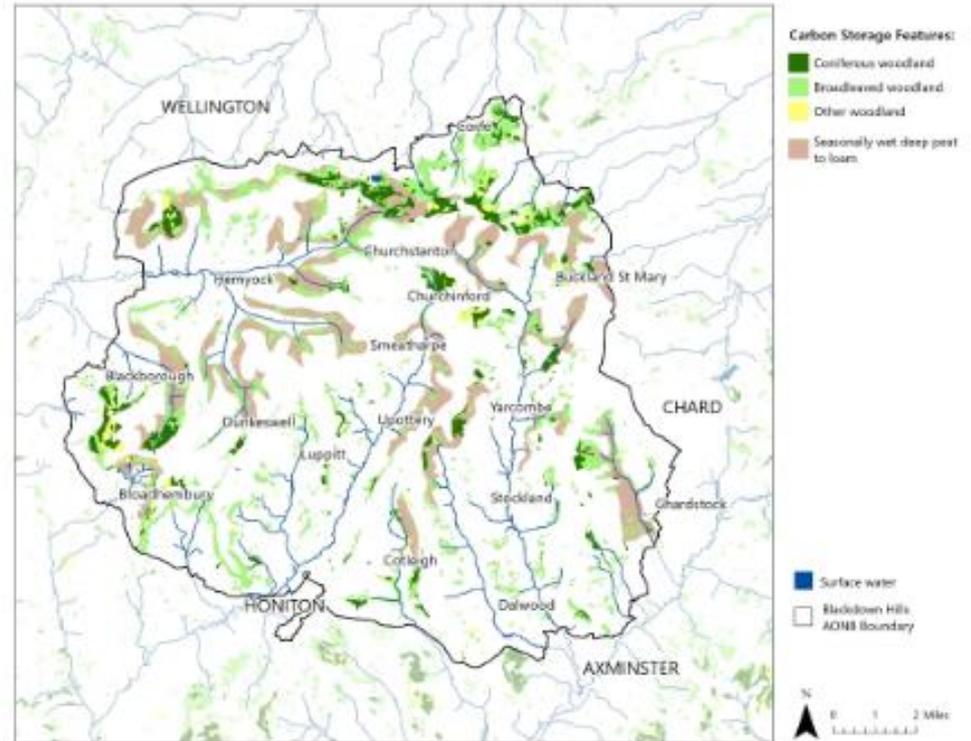


# Natural capital mapping- carbon

## Carbon Storage

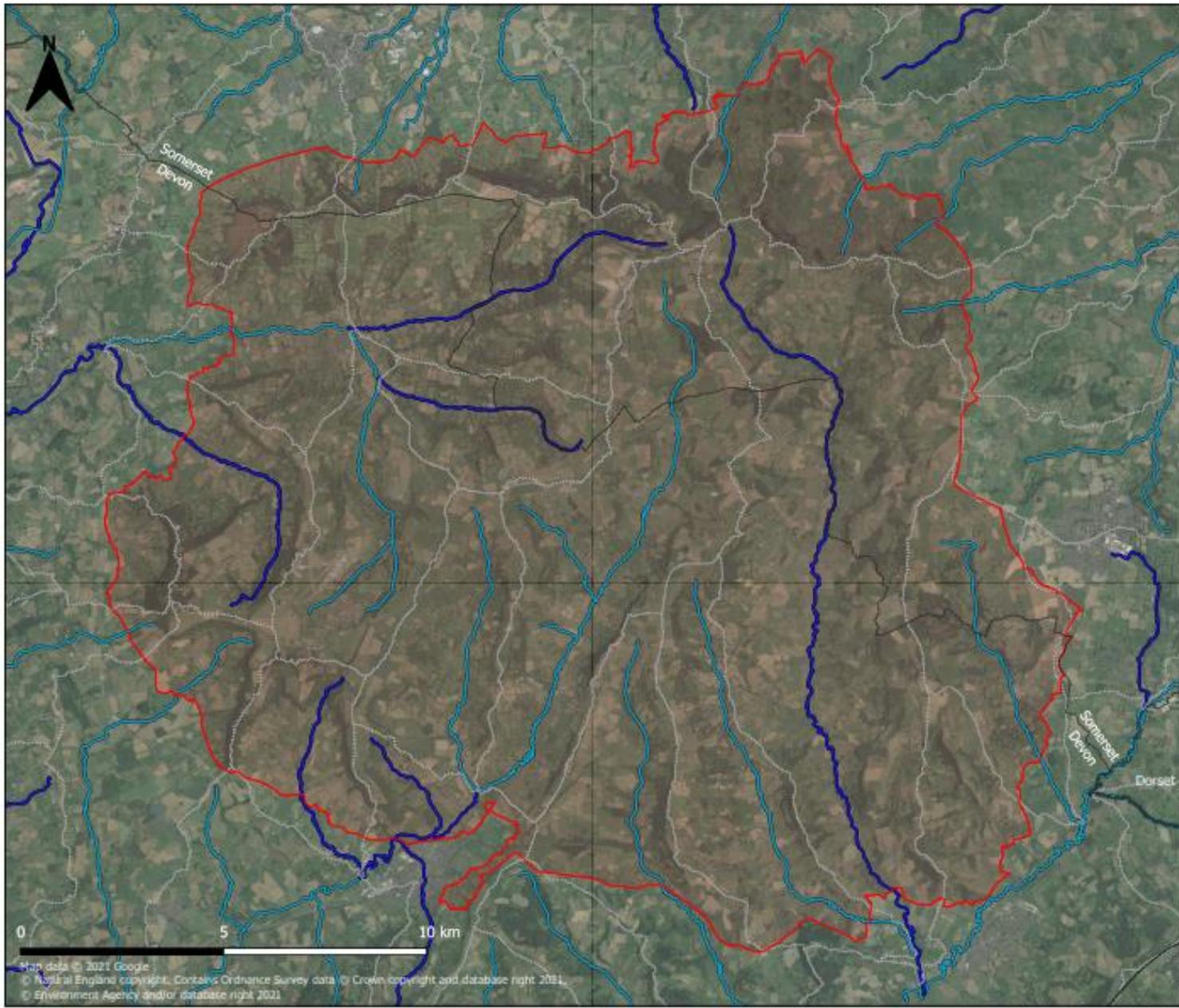
Habitat types: **Fr Fa G H W U C**

Ecosystem services:



A complete list of data sources is included on pages 39 and 40

Carbon Storage Features	Area (ha)
Coniferous woodland	1,189
Broadleaved woodland	3,892
Other woodland	318
Seasonally wet deep peat to loam	5,460



# Blackdowns AONB

River modification status and water catchment boundaries within the Blackdowns AONB

AONB Nature Recovery Plans

## Legend

- River modification status**
- Does have a physical modification
  - Does not have a physical modification

- Study Area**
- Blackdowns AONB
  - County boundary
  - Water catchment area boundary

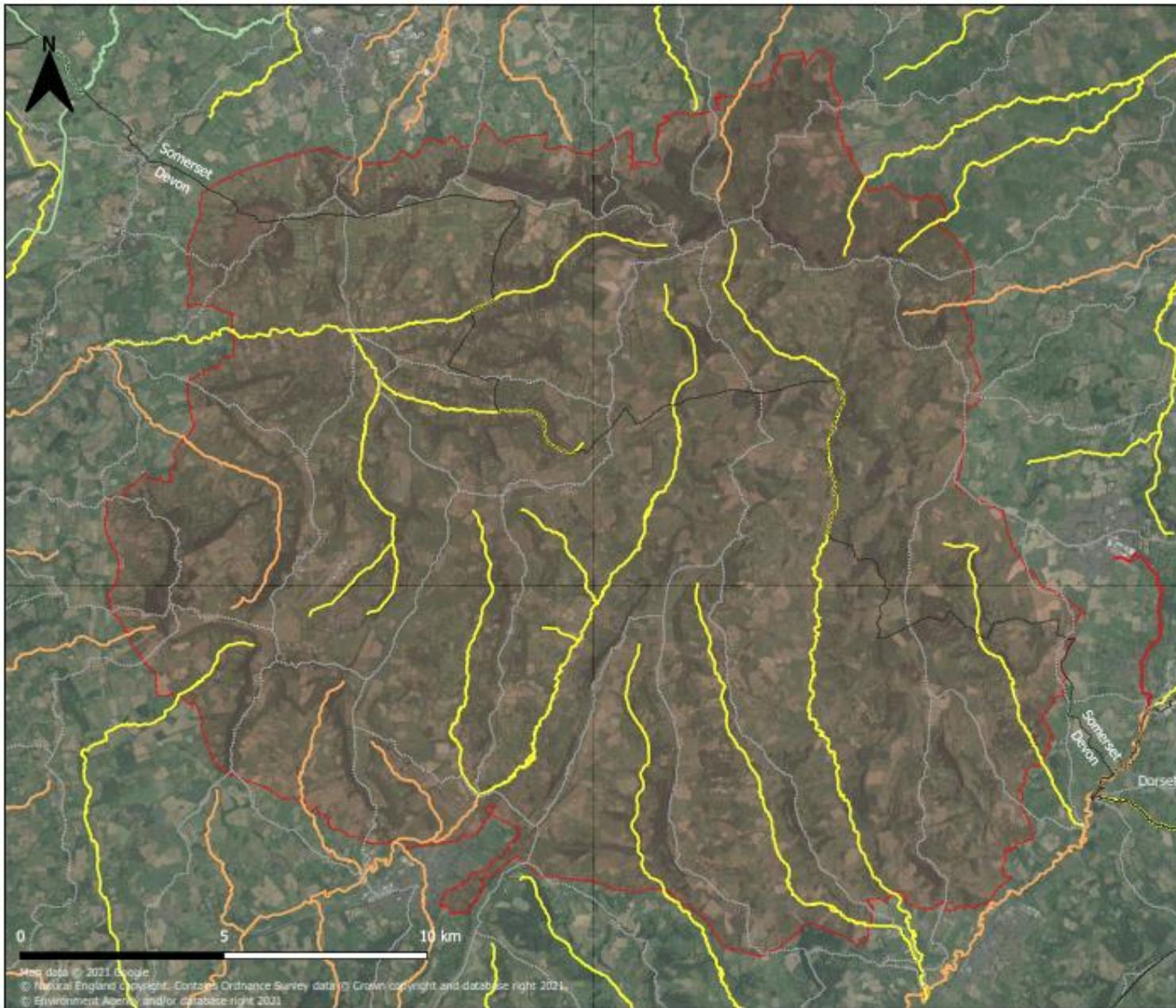
\*Physical modification: significant alterations that have resulted in substantial changes to the hydromorphology of a surface water body such that the surface water body is substantially changed in character.\* (Environment Agency 2020)



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# Blackdowns AONB

Water quality of rivers and canals within the Blackdowns AONB

AONB Nature Recovery Plans

## Legend

□ Water catchment boundaries

### Water Quality

- Bad
- Poor
- Moderate
- Good
- High

### Study Area

- Blackdowns AONB
- County boundary

The status of 'water quality' is determined by the overall biological, chemical, bacterial and viral condition of water. WFD Cycle 2 2016 data.



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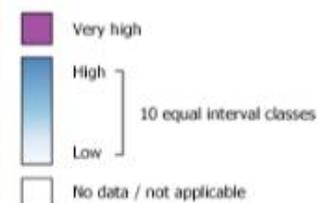
# Blackdown Hills AONB

## Quantity of freshwater floodplains within the Blackdown Hills AONB

AONB Nature Recovery Plans

### Legend

Indicator value:



- Rivers and streams
- Water catchment areas

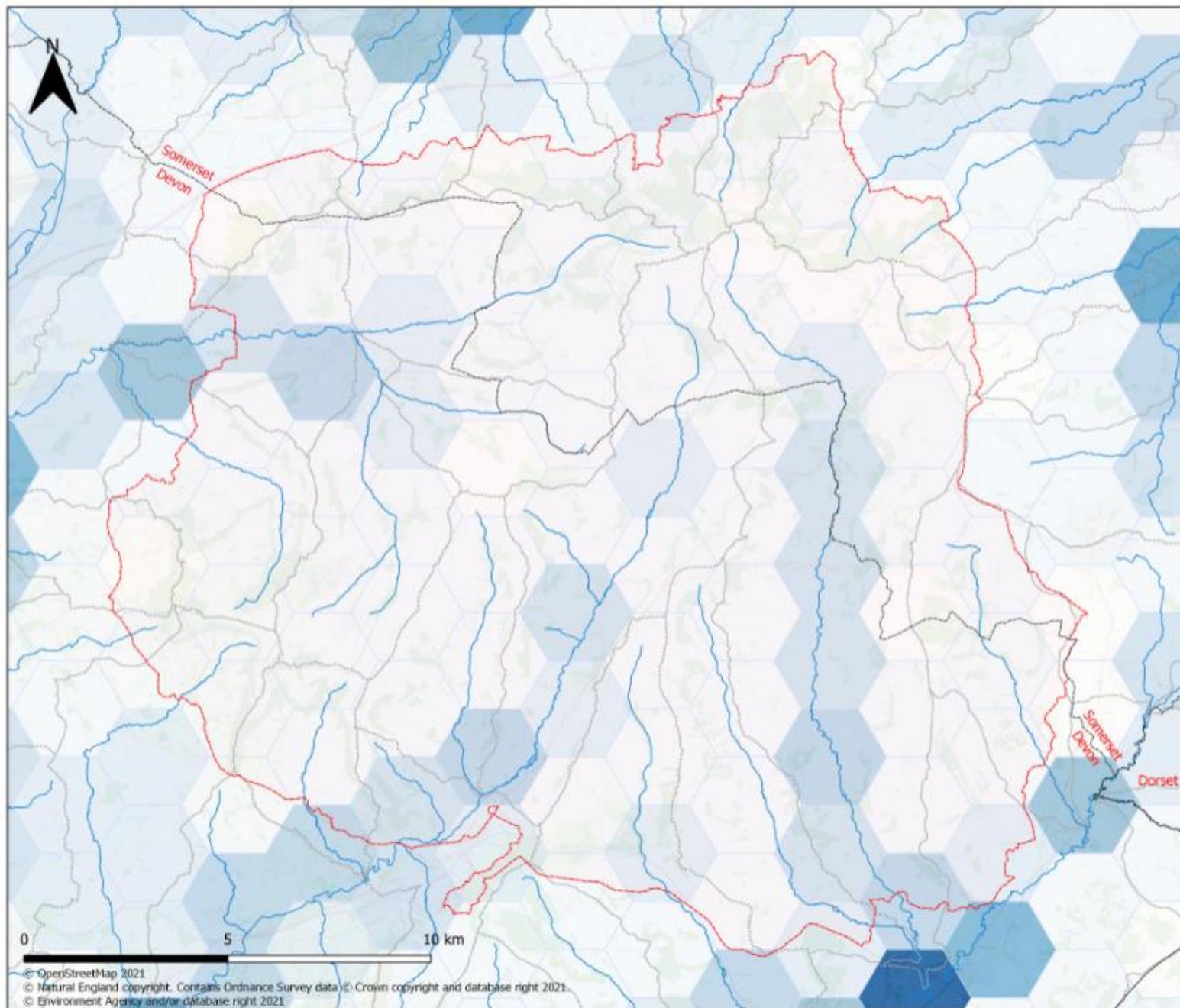
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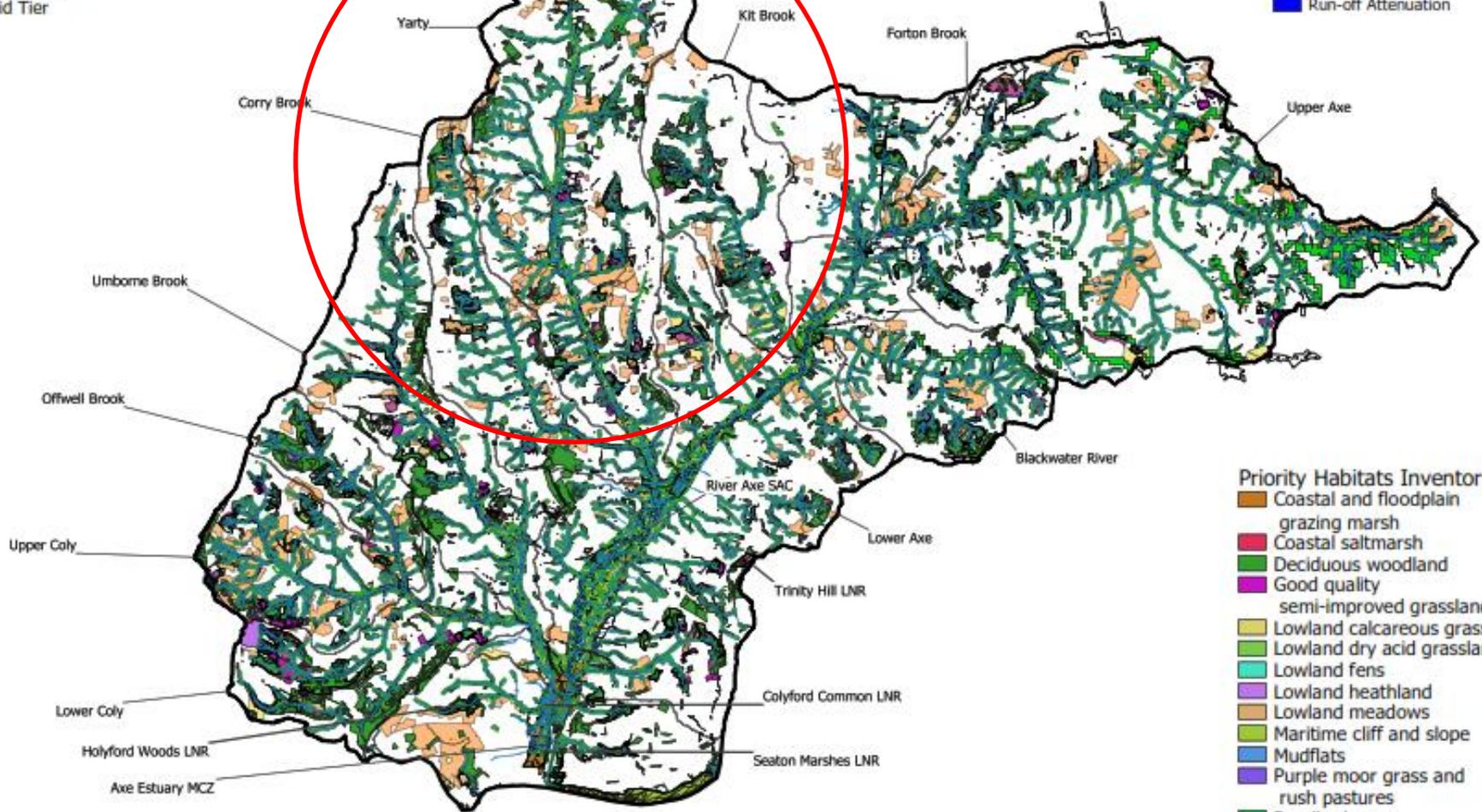


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# Habitat Expansion Opportunities through WWNP

- Detailed River Network
- ▭ Axe Project Catchment Area
- Countryside Stewardship
- ▭ Higher Tier
- ▭ Mid Tier

- ▭ WWNP Floodplain Reconnection Potential
- ▭ WWNP Floodplain Woodland Potential
- ▭ WWNP Riparian Woodland Potential
- ▭ WWNP Wider Catchment Woodland Potential
- ▭ Gully Blocking
- ▭ Run-off Attenuation



- ### Priority Habitats Inventory
- ▭ Coastal and floodplain grazing marsh
  - ▭ Coastal saltmarsh
  - ▭ Deciduous woodland
  - ▭ Good quality semi-improved grassland
  - ▭ Lowland calcareous grassland
  - ▭ Lowland dry acid grassland
  - ▭ Lowland fens
  - ▭ Lowland heathland
  - ▭ Lowland meadows
  - ▭ Maritime cliff and slope
  - ▭ Mudflats
  - ▭ Purple moor grass and rush pastures
  - ▭ Reedbeds
  - ▭ Saline lagoons
  - ▭ Traditional orchard

Map includes County/Local Wildlife Sites. Contains DERC, DBRC and SERC data © should not be copied/republished or used to inform commercial activity. Data licensed to Backdown Hills AONB 2021.

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# ‘Other’ opportunity mapping



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Provisional findings for discussion:

- Seasonally wet deep peat to loam- follows river valleys- accurate?
- Moderate to poor water quality
- Widespread ‘working with natural processes’ opportunities



# Partner data/ evidence

- For example, Butterfly Conservation analysis of priority butterflies
- Other species surveys being undertaken
- Anecdotal evidence

# Visualisations- 'Direction of travel'



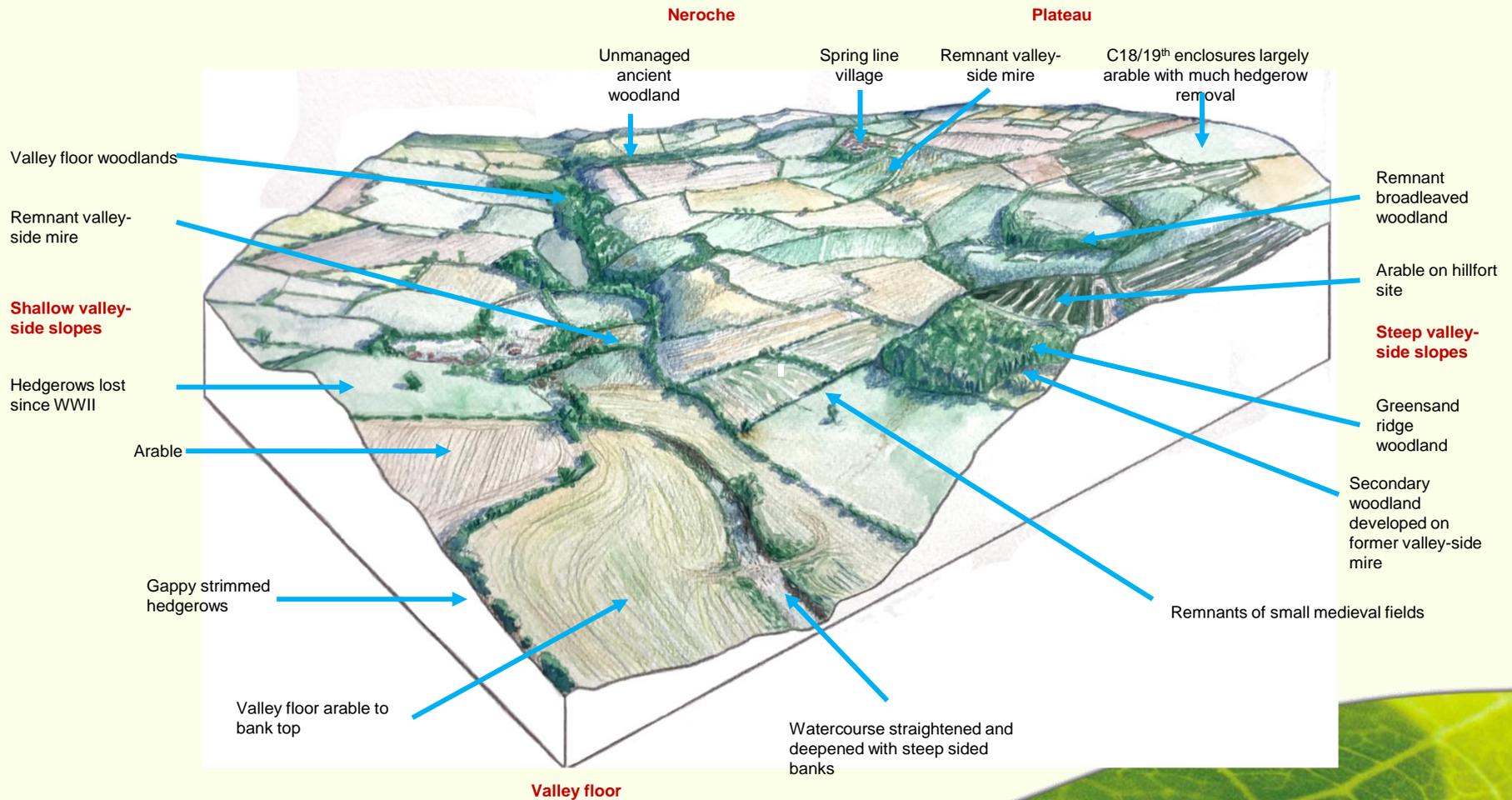
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Workshop discussion:

1. What should be our vision for nature's recovery (...and delivery of public goods), in the context of cultural & historic landscapes
2. What story are the visuals 'telling you'
3. Have all the special qualities been captured?
4. Do you agree with the 'direction of travel' from present day → to a resilient and nature rich landscape (delivering public goods & services) by 2030/ 42/ 50?
5. What does this mean for farming systems and local communities?
6. Could it be supported through proposed support mechanisms?
7. Is it enough to enable us to reach '30 by 30'?
8. Who should we consult further?

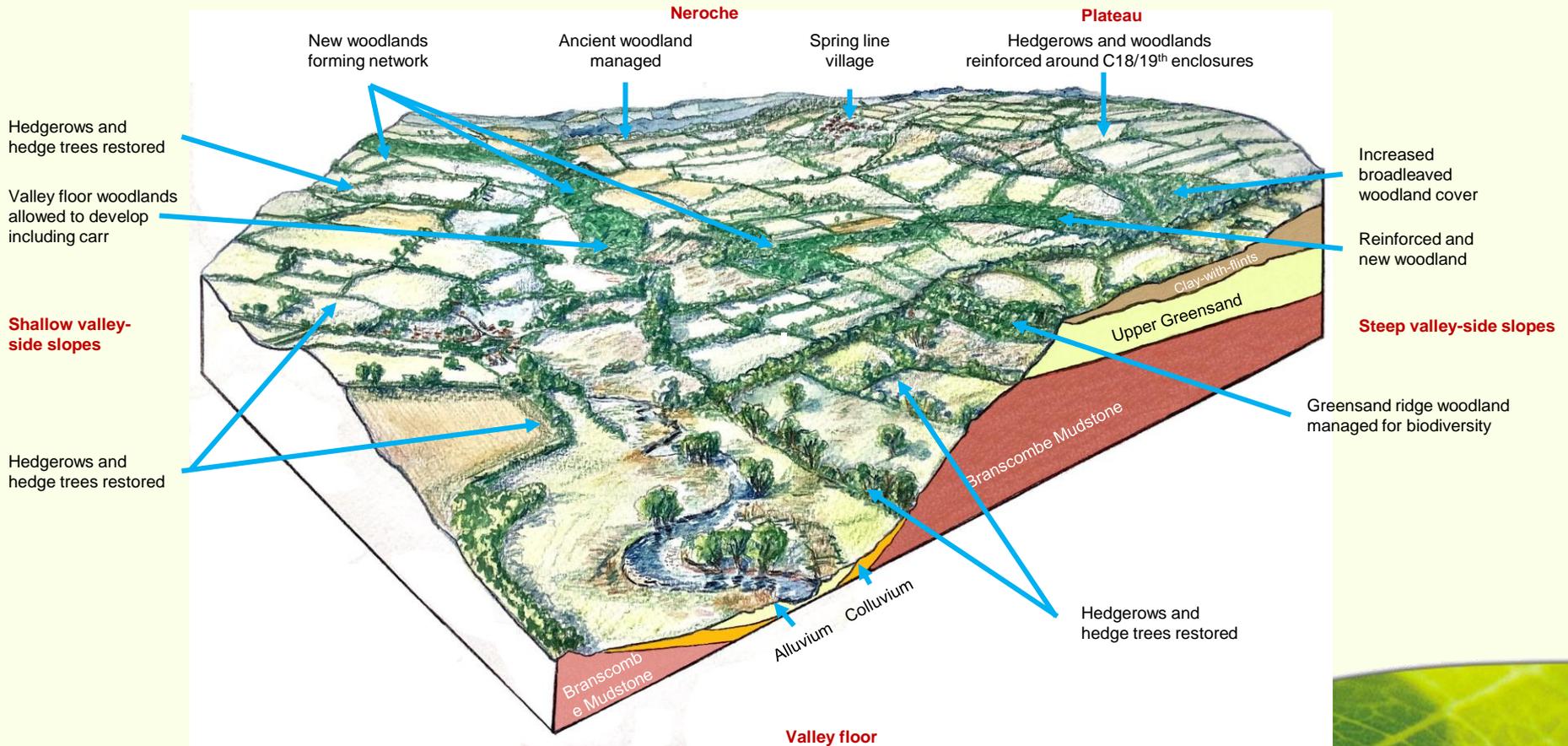


## Blackdown Hills AONB - Current landscape



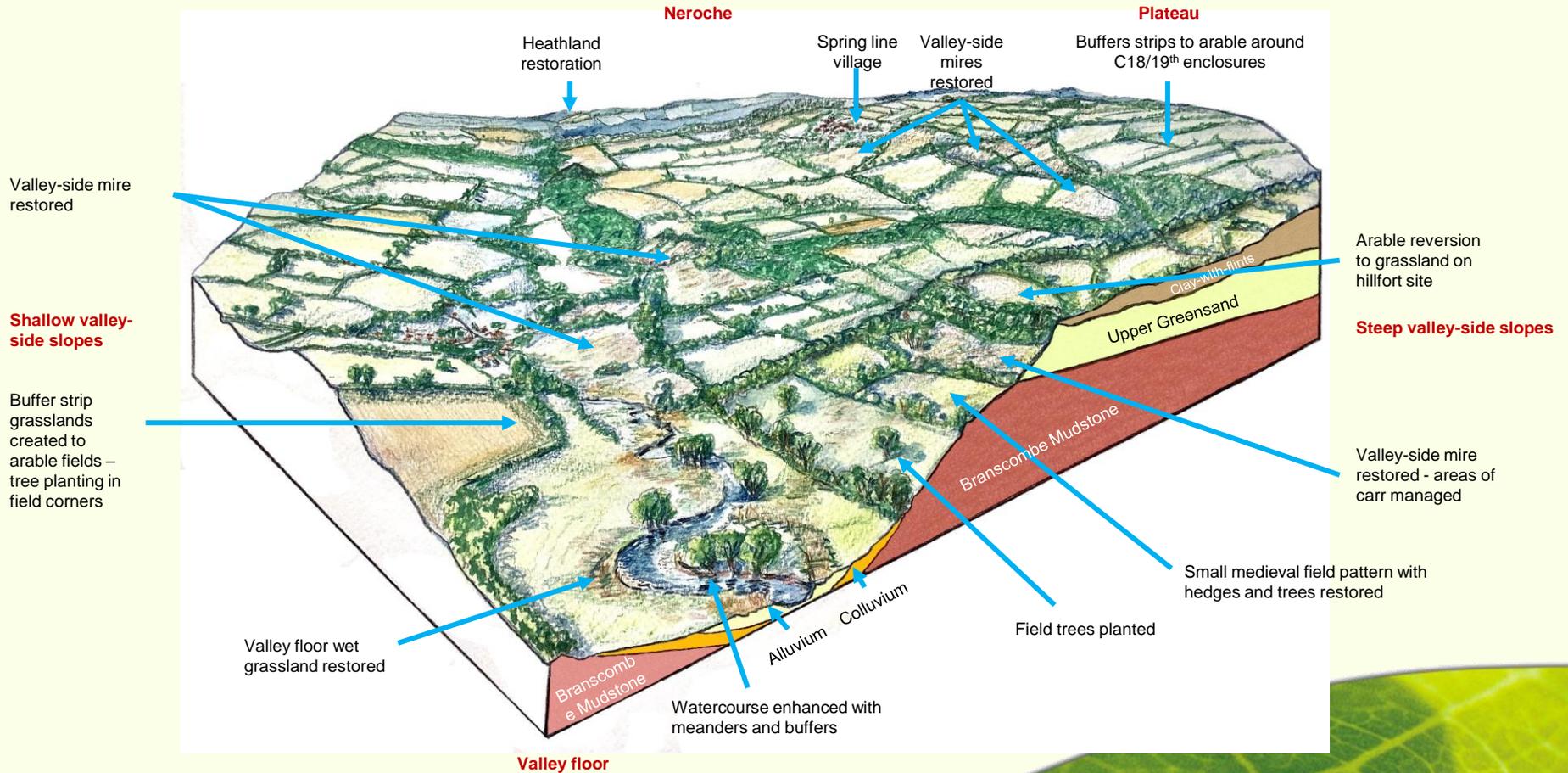


## Blackdown Hills AONB – Visualisation Woodland and hedge network





## Blackdown Hills AONB – Visualisation Grasslands and mires



# Visualisations- 'Direction of travel'



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Workshop discussion:

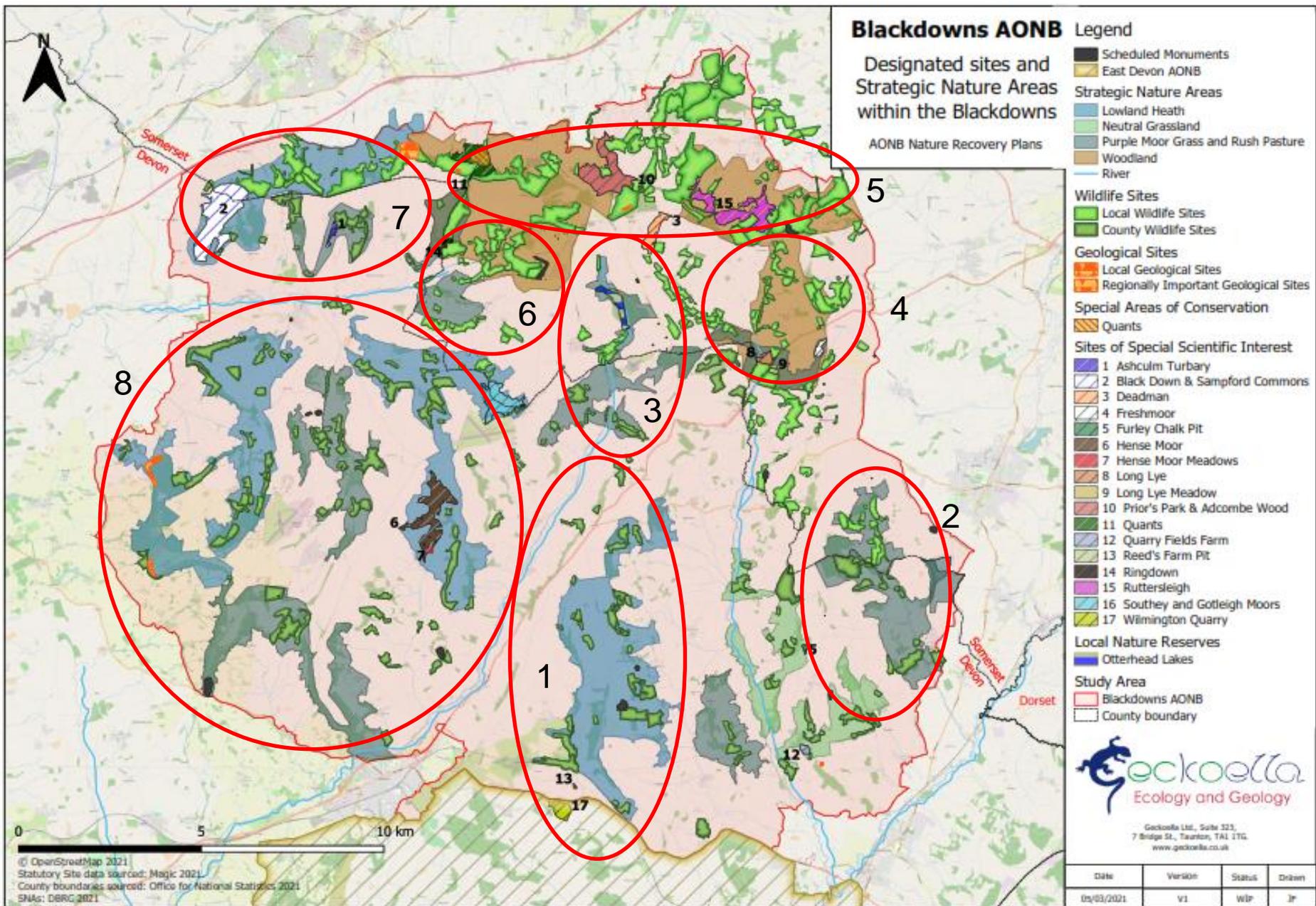
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5. What does this mean for farming systems and local communities?
6. Could it be supported through proposed support mechanisms?
7. Is it enough to enable us to reach '30 by 30'?
8. Who should we consult further?

# Bringing everything together



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- What and where are our nature conservation/ resilient landscapes priorities?
- 6-8 Nature Recovery Areas?- see map
- On what basis should we define boundaries?- e.g. by sub-catchment or just SNA?
- Farmer clusters?- and other opportunities?
- Prepare a costed plan ready for funding opportunities



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 SNAs: DBRC 2021

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# General discussion





# Draft Action Plan

- Integral part of the Nature Recovery Plan
- Define priorities for action (Nature Recovery Areas and sustainable land use area)
- What actions are required? Farmer clusters? Triage?
- Mechanisms and funding are? e.g. Farming in Protected Landscapes (FiPL), environmental land management (E.L.M), Landscape Enhancement Initiative (LEI) etc.
- What projects are already running in the AONB Partnership and beyond that can contribute? e.g. Connecting the Culm, other partner projects

# Monitoring & evaluation

Plans to align with Defra KPIs/ Colchester Declaration targets



Credit- Simon Smith



# Where do we go next

- A draft State of Nature Report will be sent out for consultation to you/ others this month (April)
- Your comments will shape the draft Nature Recovery Plan
- Are you willing to offer more time for more detailed, small group discussions?
- Aim to complete a 'working' Nature Recovery Plan by July 2021



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# Final comments and thanks

