



# Using spatial data to explore climate change adaptation and ecological network planning

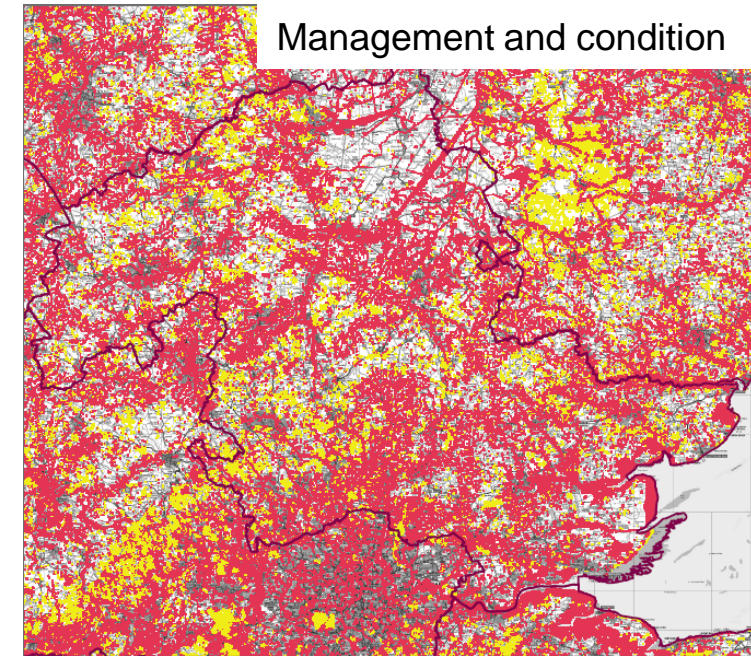
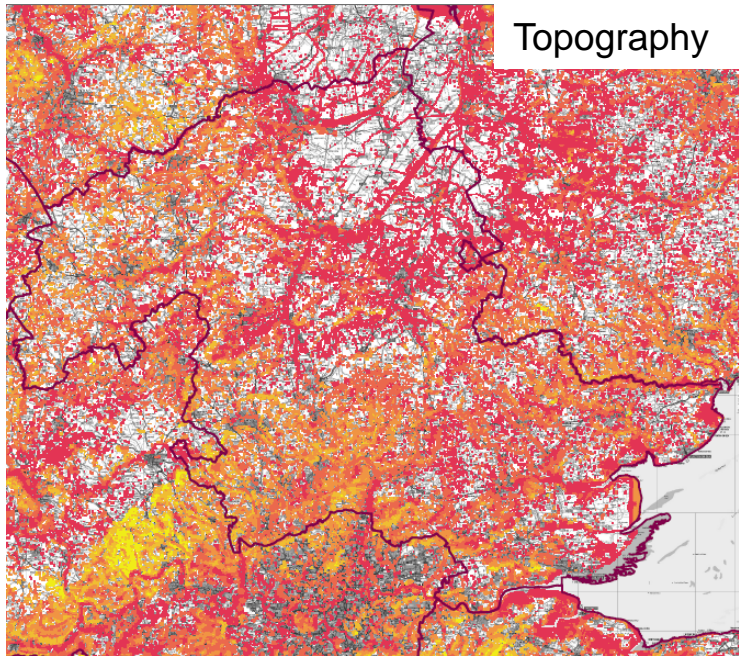
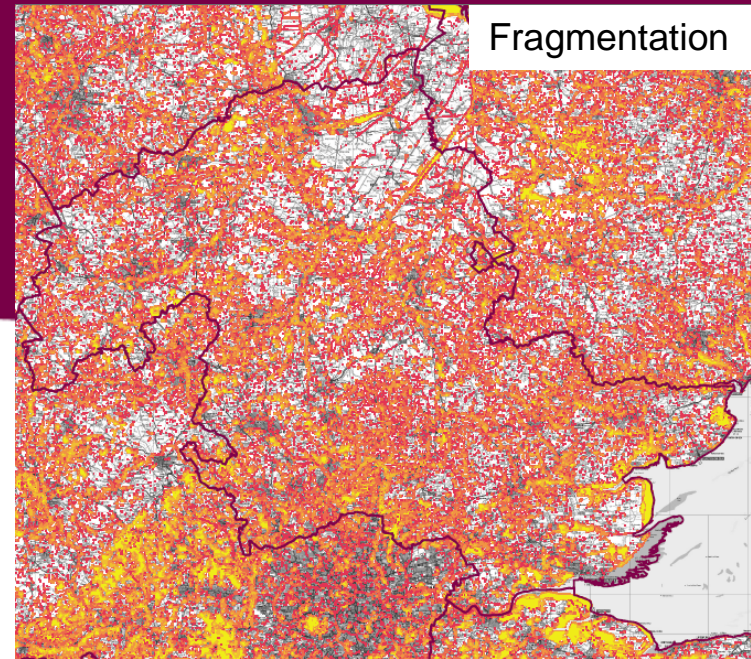
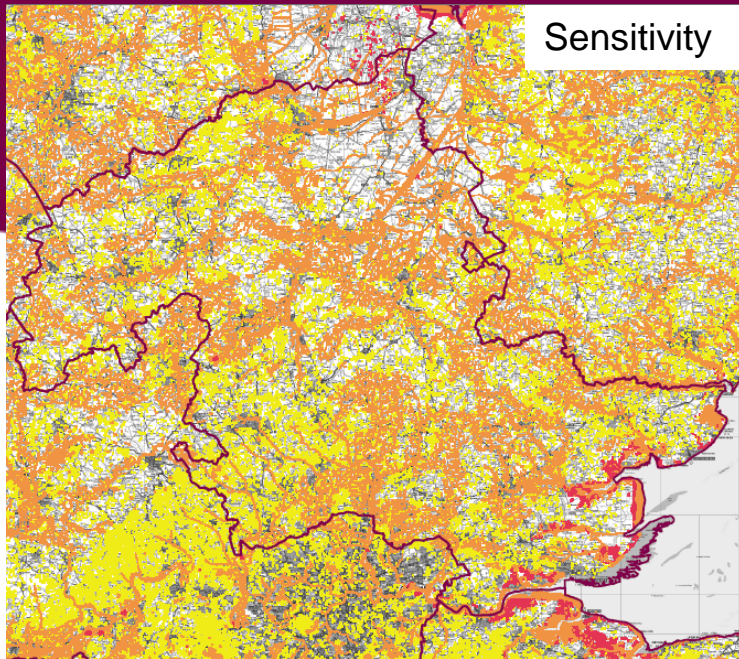
Sarah Taylor

- National biodiversity climate change vulnerability assessment
- Biodiversity 2020 1D – habitat potential maps
- Carbon storage and sequestration
- Climate change refugia
- Species risks and opportunities modelling

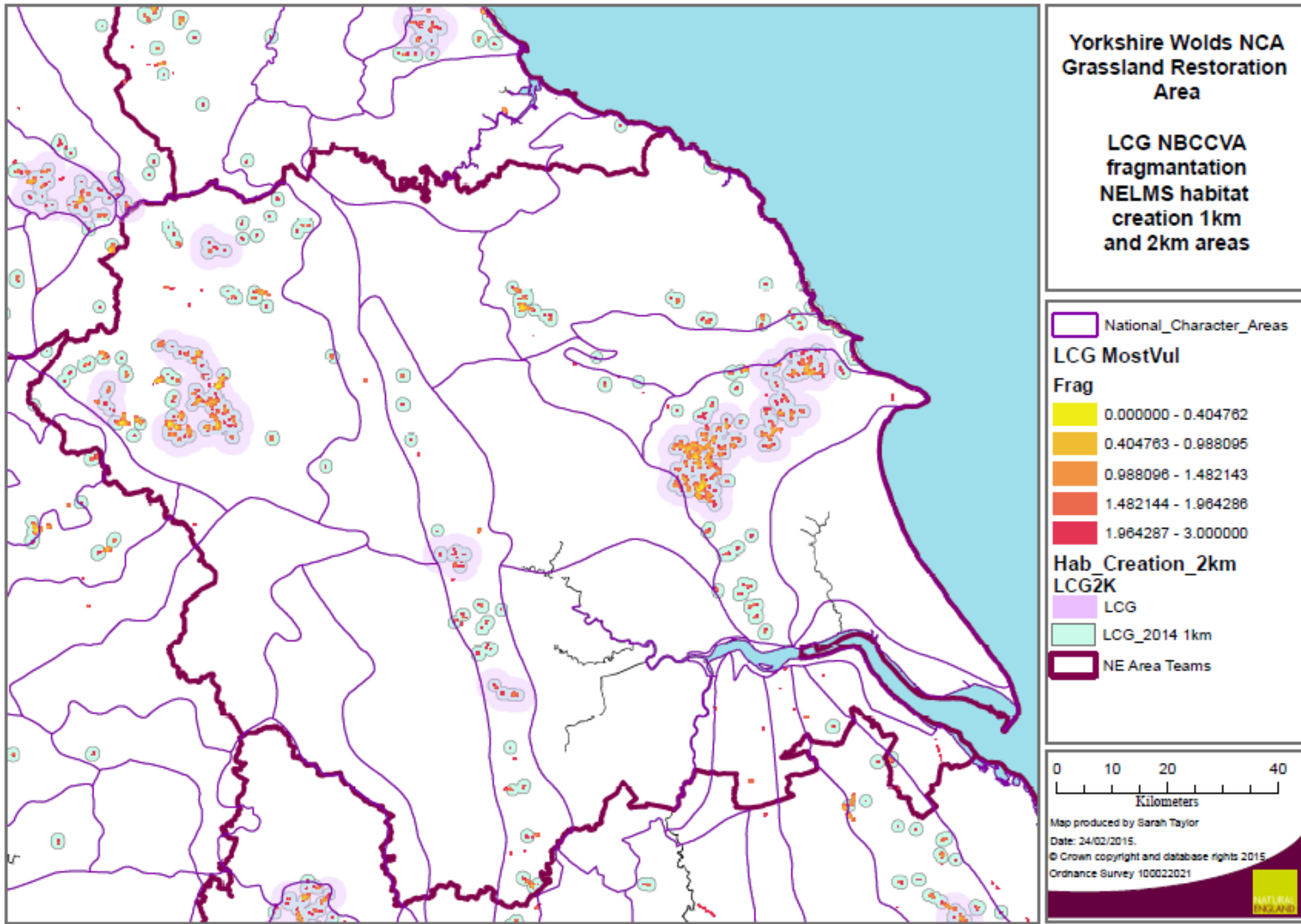
Now working on bringing these together, along with other available datasets, to provide the most useful evidence base for our Area Teams and other projects

Mapping caveat - not all this data is publicly available at present, these maps are therefore indicative and exploratory, please get in touch if you'd like to discuss these further.

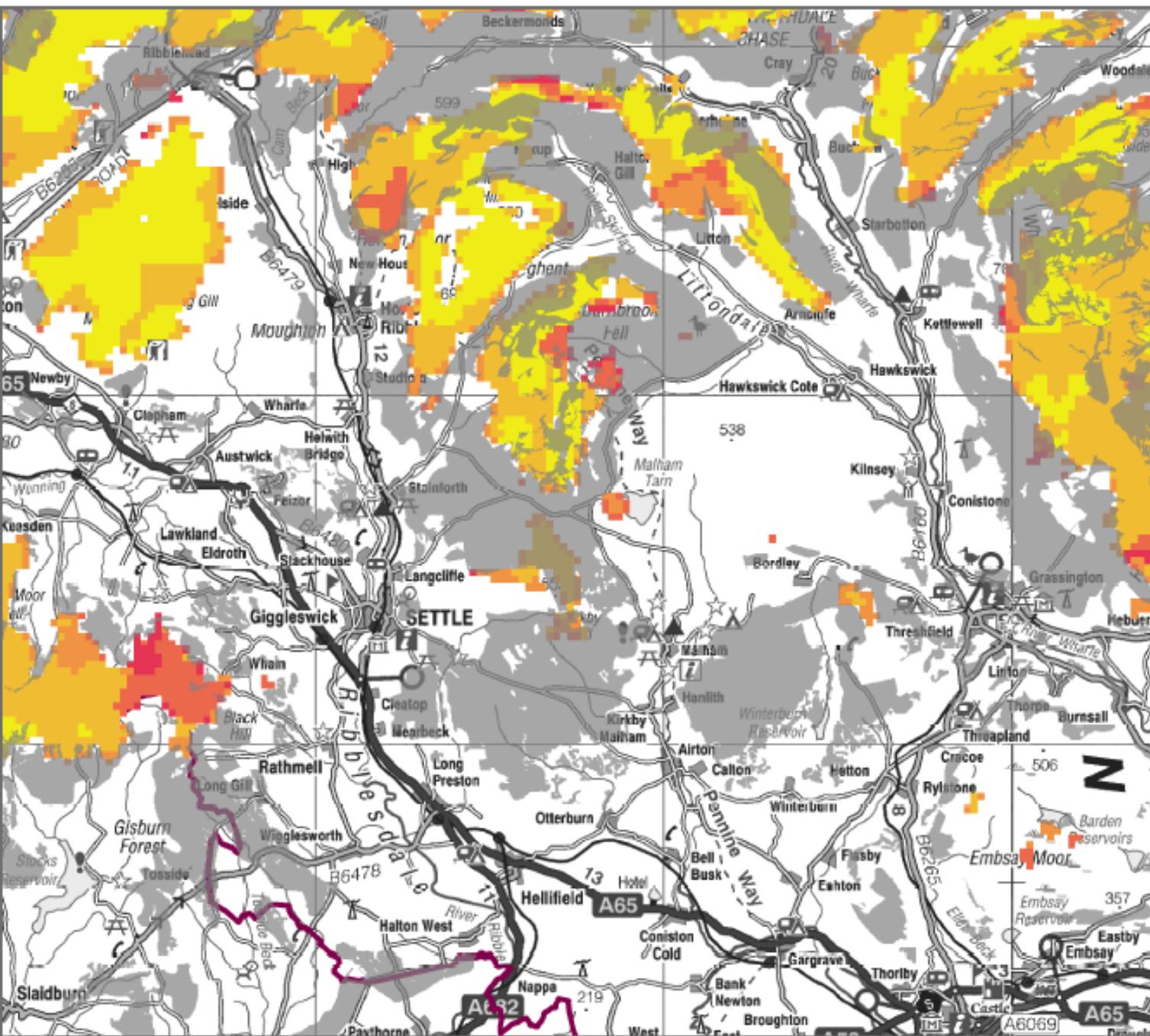
National  
Biodiversity  
Climate  
change  
Vulnerability  
Assessment  
(NBCCVA)



# NBCCVA and prioritising habitat creation - Lowland Calcareous Grassland



# Biodiversity 2020 1D – Blanket Bog vulnerability and potential - Malham

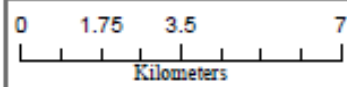


**Area Team 3  
Malham Area**

**NBCCVA for  
blanket bog  
plus habitat  
potential**

## Legend

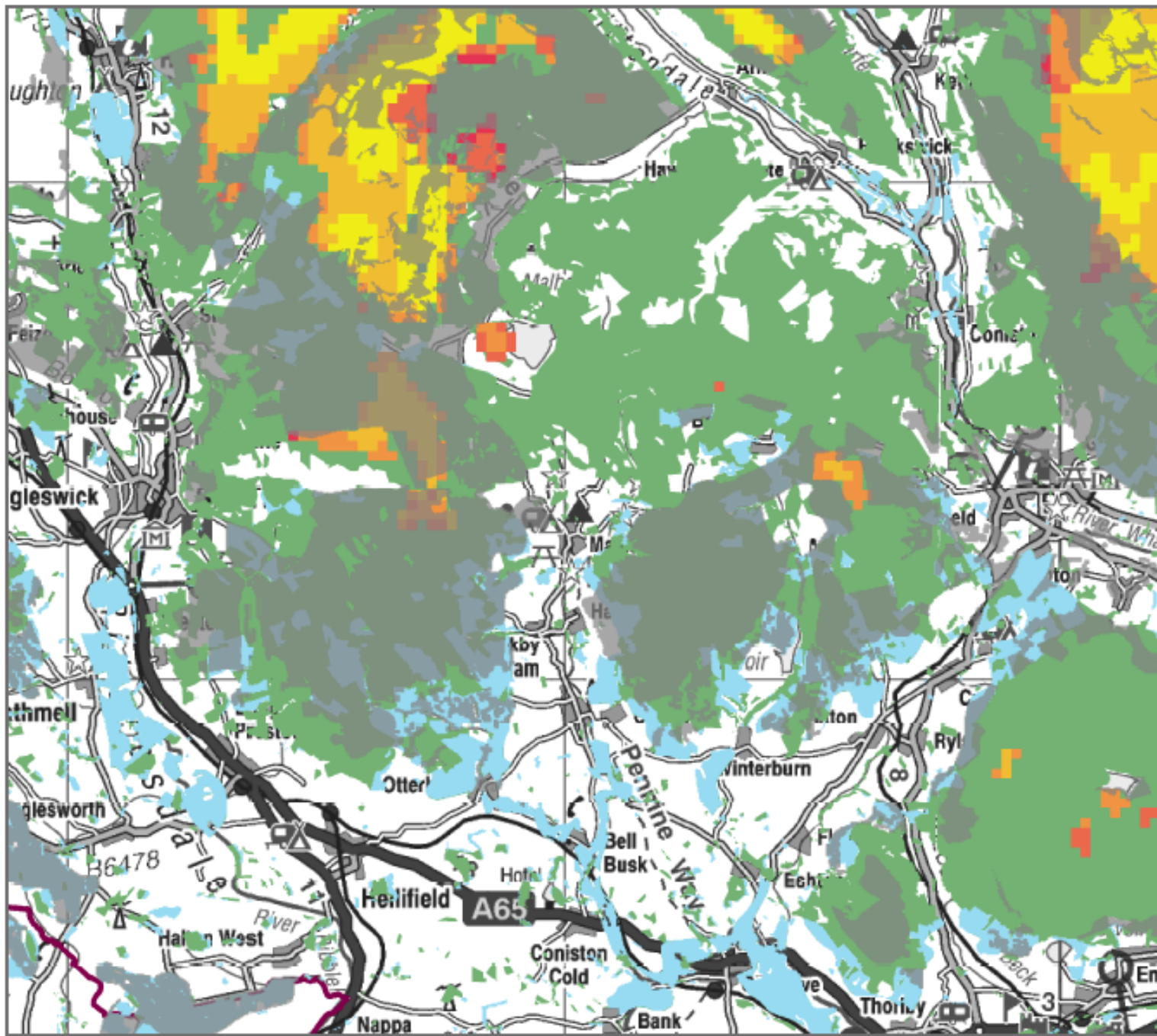
- Blanket Bog Potential
- BLB MostVul**
- MaxVul**
- 0.375000
- 0.375001 - 0.750000
- 0.750001 - 1.125000
- 1.125001 - 1.500000
- 1.500001 - 2.825000
- NE Area Teams



Map produced by Sarah Taylor  
Date: 20/03/2015.  
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Ordnance Survey 100022021



# Biodiversity 2020 1D, vulnerability BLB + Carbon



Area Team 3  
Malham Area

NBCCVA for blanket bog plus carbon storage and sequestration potential data and blanket bog potential

## Legend

Blanket Bog Potential

BLB MostVul

MaxVuln

- 0.375000
- 0.375001 - 0.750000
- 0.750001 - 1.125000
- 1.125001 - 1.500000
- 1.500001 - 2.825000
- Carbon\_Seq\_NELMS
- Carbon\_Storage\_NELMS
- NE Area Teams

0 1.25 2.5 5  
Kilometers

Map produced by Sarah Taylor

Date: 20/03/2015.

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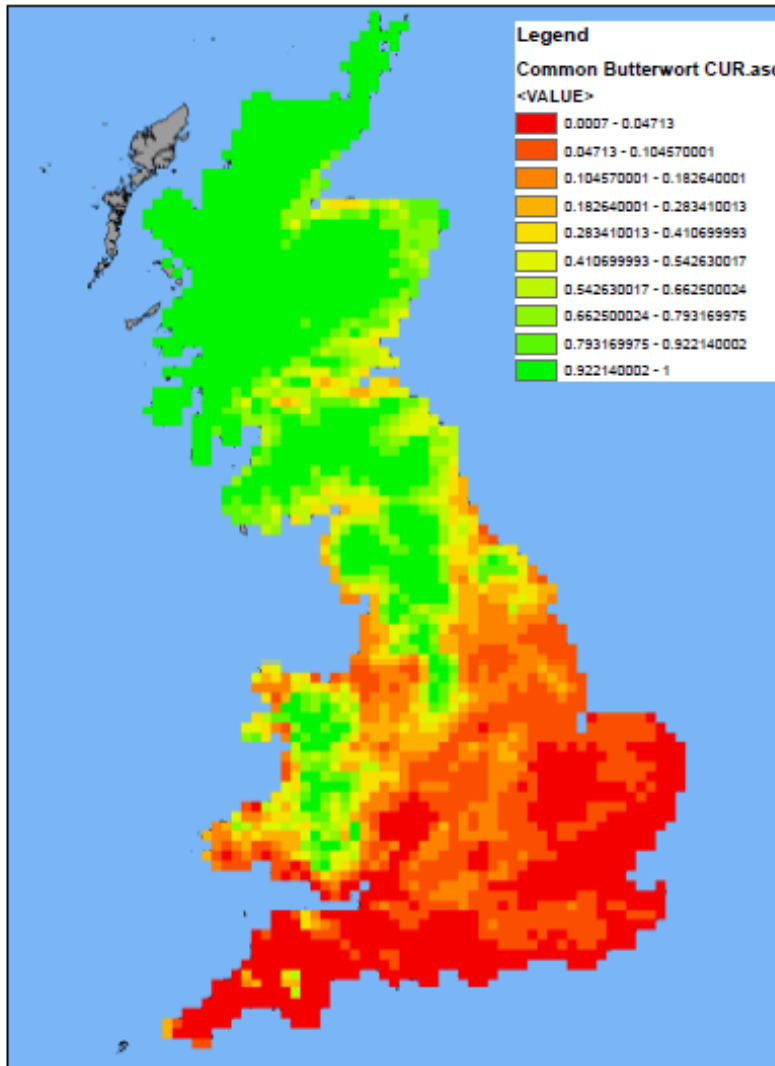
Ordnance Survey 100022021



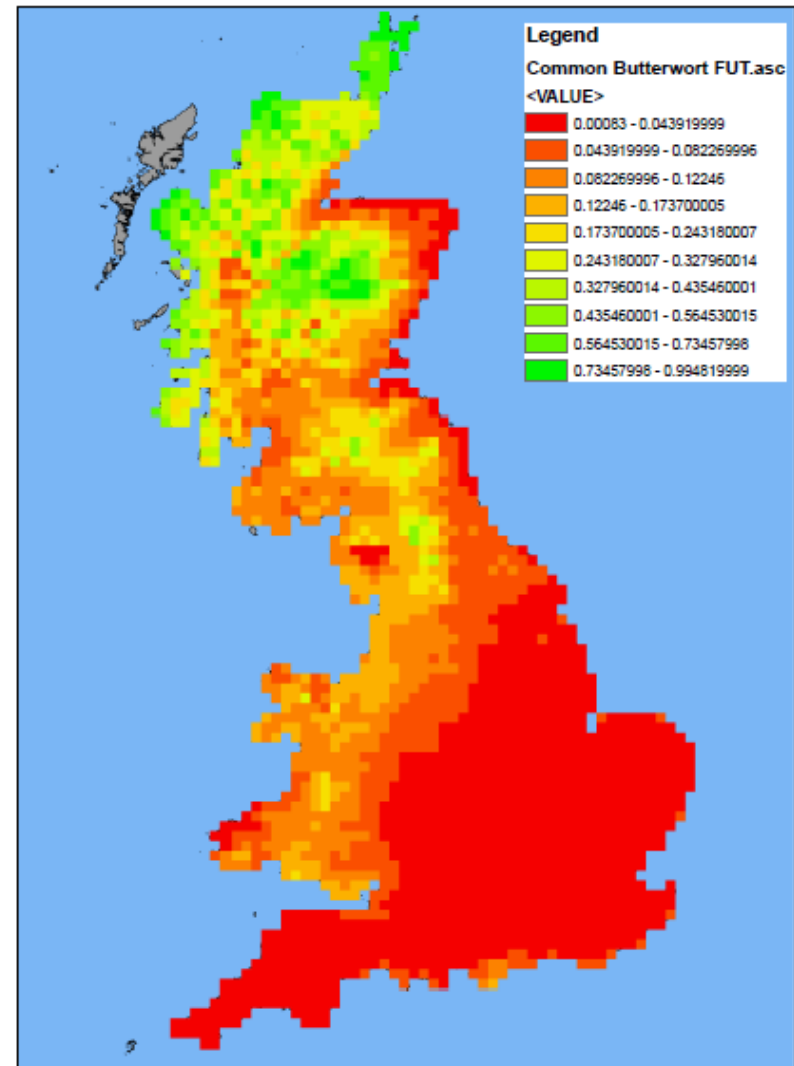
# Species Risks and Opportunities modelling – Common Butterwort



## Common Butterwort Current Modelled Distribution



## Common Butterwort Future Modelled Distribution



Resolution

Zoom to a

Region

Vice couni

Date rang

Date 1

Date 2

Date 3

Show outli

Overlays

Coastli

Ordnar

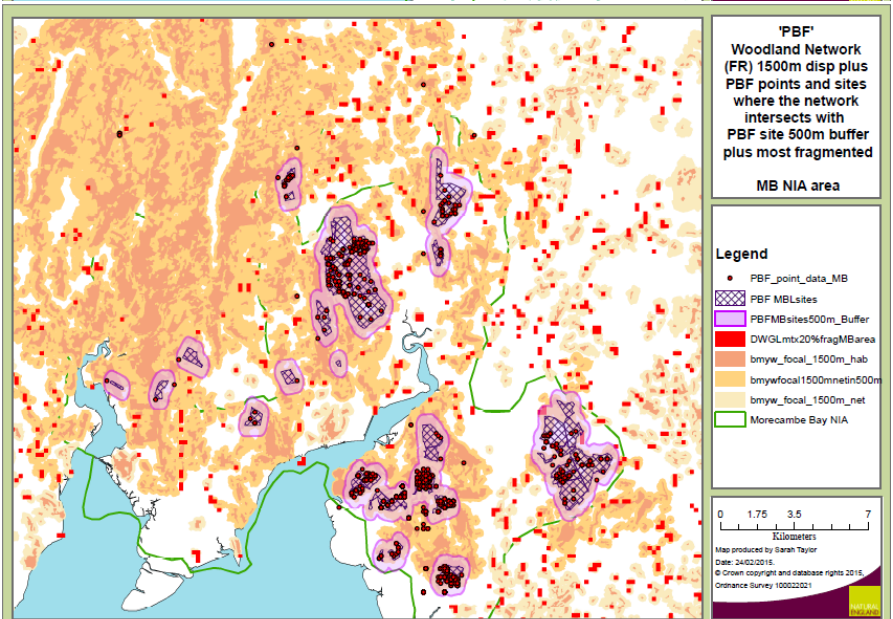
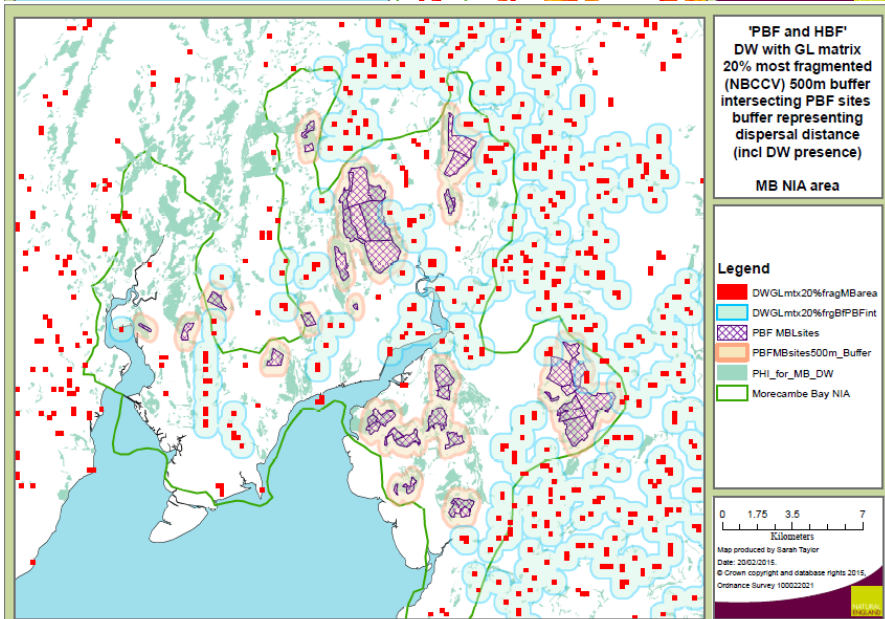
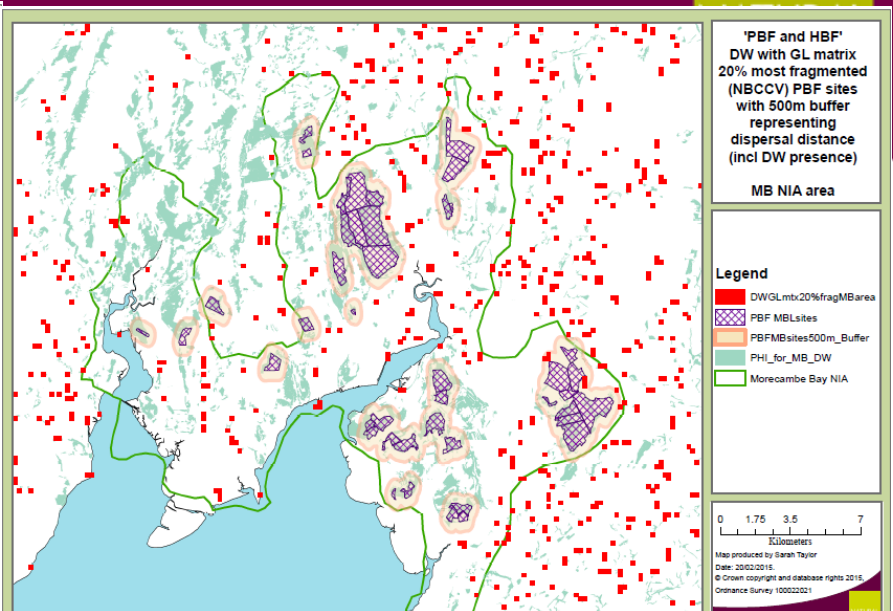
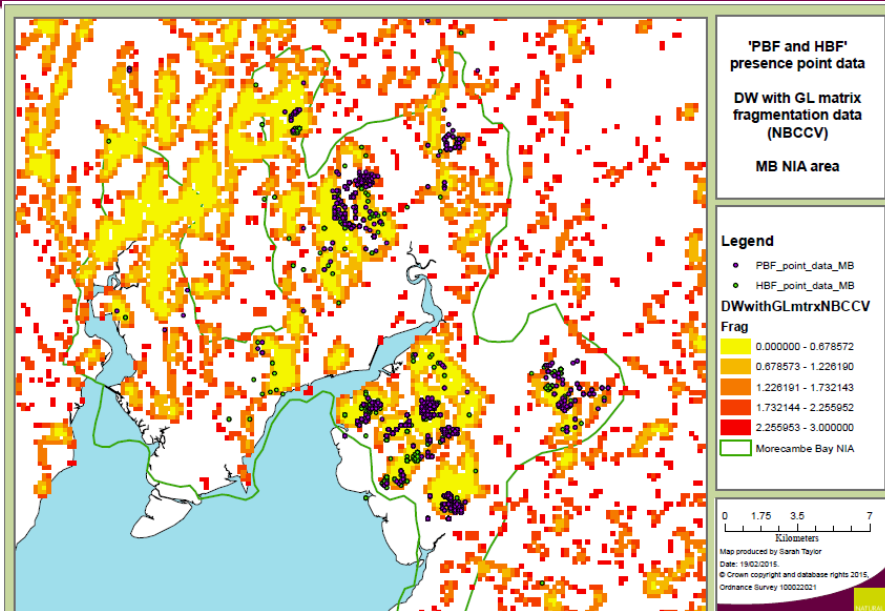
Vice cc

Download

Other Opti

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[Request E](#)

# Morecambe Bay explorations





# IPENS

Improvement programme  
for Natural England's  
Natura 2000 Sites

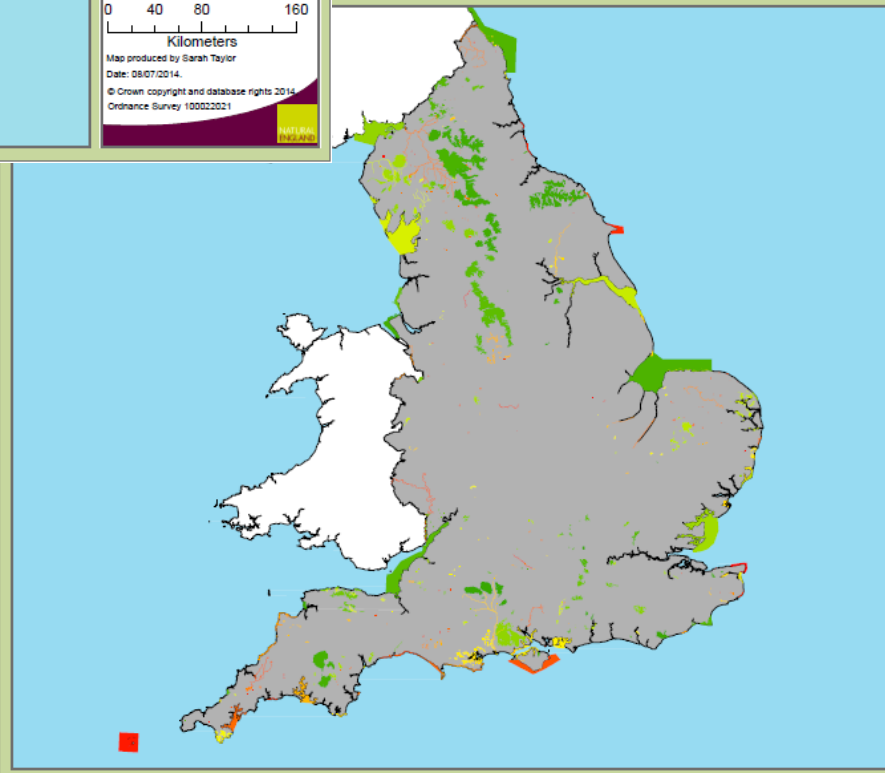
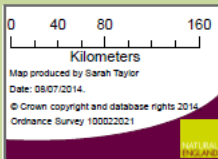
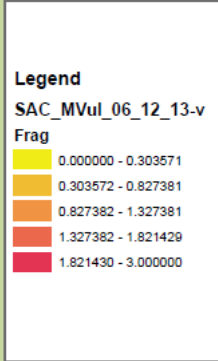


## Fragmentation scores and rankings

- Climate change theme plan
- Habitat fragmentation theme plan
- Ranking sites on fragmentation and vulnerability (habitat occurring on site)

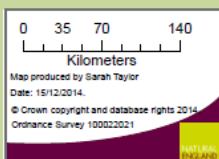
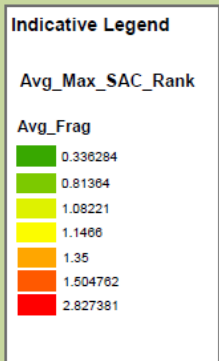
National Biodiversity  
Climate Change  
Vulnerability Model for  
IPENS

Fragmentation  
of habitat in SACs  
(relative to SACs)



National Biodiversity  
Climate Change  
Vulnerability Model for  
IPENS

SACs ranked by  
fragmentation  
of priority habitats  
(relative to SACs)



- Working with Area Teams to use spatial data to inform work in focus areas
- Working across all our work areas to use the data
  - Land management/AES
  - Designated sites
  - Land use/green infrastructure
- Landscape scale conservation and spatial data
- Collaborative working across teams and organisations on combining available data and providing evidence to users.



**Thank you**

**[Sarah.taylor@naturalengland.org.uk](mailto:Sarah.taylor@naturalengland.org.uk)**

**0208 026 6069**

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