



Putting the GI in Green Infrastructure

Alex Coomer, Natural England GI Specialist

13th October 2009

Introduction

- What is GI?
 - Geographic Information or Spatial Data
 - Any information relating to a location
- Why do we need to use Geographic Information?
 - Provides a good source of evidence to assist decision making.
 - Helps to identify priorities and utilise limited resources in areas that need it most.
 - So we can be accountable for the strategic descisions that we make.



Where can I get Geographic Information?

- MAGIC – Multi Agency Geographic Information for the Countryside...

www.magic.gov.uk

- Provides access to data from Natural England, English Heritage, Forestry Commission, Sustrans and the Woodland Trust.

- Natural England's data download page...

http://www.gis.naturalengland.org.uk/pubs/gis/GIS_register.asp

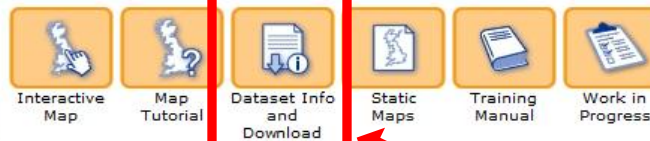
A quick demonstration follows...

MAGIC

[About Magic](#) [Contact Us](#) [Online Resources](#) [Help](#) [What's New](#) [Site Map](#)



Blanket Bog near Barbon in Lunesdale, Cumbria
© D. Key, Natural England



MAGIC

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Defra is the custodian of MAGIC with Natural England managing the service under the direction of a cross-government Steering Group.

Spotlight

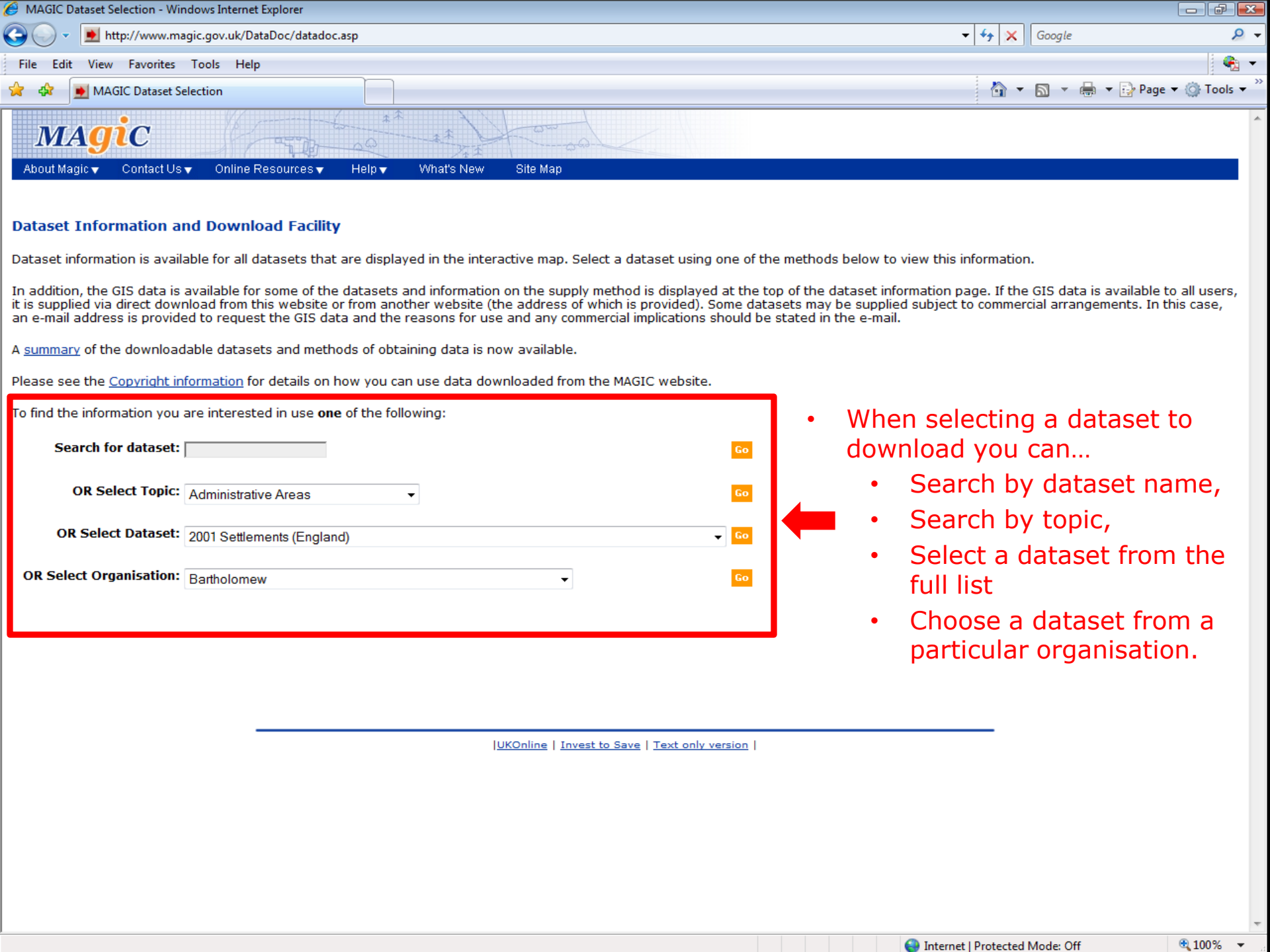
Updates

The next update to datasets and the interactive map will be carried out on **Wednesday 4 November**. The interactive map will be unavailable from **4pm** on this day to allow the update to take place. Service will resume at **7am** the following morning.

New BAP (Biodiversity Action Plan) Habitat datasets added

See [What's new](#).

To download a dataset click here



Dataset Information and Download Facility

Dataset information is available for all datasets that are displayed in the interactive map. Select a dataset using one of the methods below to view this information.

In addition, the GIS data is available for some of the datasets and information on the supply method is displayed at the top of the dataset information page. If the GIS data is available to all users, it is supplied via direct download from this website or from another website (the address of which is provided). Some datasets may be supplied subject to commercial arrangements. In this case, an e-mail address is provided to request the GIS data and the reasons for use and any commercial implications should be stated in the e-mail.

A [summary](#) of the downloadable datasets and methods of obtaining data is now available.

Please see the [Copyright information](#) for details on how you can use data downloaded from the MAGIC website.

To find the information you are interested in use **one** of the following:

Search for dataset:

OR Select Topic: Administrative Areas

OR Select Dataset: 2001 Settlements (England)

OR Select Organisation: Bartholomew

- When selecting a dataset to download you can...
 - Search by dataset name,
 - Search by topic,
 - Select a dataset from the full list
 - Choose a dataset from a particular organisation.



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Search for dataset:

OR Select Topic: Rural Designations - Other

OR Select Dataset: Coastal and Marine Resource Atlas

OR Select Organisation: Joint Character Areas

Rural Designations - Other
Rural Designations - Statutory
Rural Land-based Schemes



- For example, you could choose to view a list of datasets that fall within the non statutory Rural Designations topic



Dataset Information

Datasets in selected Geographical Topic: Rural Designations - Other

- ▶ [Catchment Sensitive Farming Delivery Initiative 2006-2009: Priority Catchments \(England\)](#)
- ▶ [Community Forests \(England\)](#)
- ▶ [Country Parks \(England\)](#)
- ▶ [Doorstep Greens \(England\)](#)
- ▶ [Eutrophic Water NVZ \(England\)](#)
- ▶ [Green Belt \(England\)](#)
- ▶ [Groundwater NVZ - Monitoring Data \(England\)](#)
- ▶ [Groundwater NVZ \(England\)](#)
- ▶ [Heritage Coasts \(England\)](#)
- ▶ [Important Bird Areas \(England\)](#)
- ▶ [Land Management Advisory \(England\)](#)
- ▶ [Millennium Greens \(England\)](#)
- ▶ [National Forest \(England\)](#)
- ▶ [National Trails \(England\)](#)
- ▶ [Nitrate Vulnerable Zones \(England\)](#)
- ▶ [NUTS1 - Government Office Regions \(England\)](#)
- ▶ [Objective 1 Areas \(England\)](#)
- ▶ [Objective 2 Areas \(England\)](#)
- ▶ [Registered Battlefields \(England\)](#)
- ▶ [Registered Parks and Gardens \(England\)](#)
- ▶ [Surface Water NVZ \(England\)](#)
- ▶ [Upland Experiment Areas \(England\)](#)
- ▶ [Urban Areas \(England\)](#)
- ▶ [Walking the way to Health Initiative \(England\)](#)

- You can then select an individual dataset to download

[New search](#)



Dataset Information: Millennium Greens (England)

This dataset can be downloaded from http://www.gis.naturalengland.org.uk/pubs/gis/gis_register.asp

Name	Millennium Greens (England)
Map Topic(s)	Rural Designations - Other
Abbrev Name	
Theme	Two hundred and forty-five Millennium Greens exist. They are permanent areas of public green space, close to people's homes, in urban or rural locations. They provide breathing spaces for relaxation, play and enjoyment of nature. They were funded by the Millennium Commission, via the Countryside Agency (now Natural England), using National Lottery money. The project was started in 1996 and ran until 2001. Each Green is now managed by its own charitable trust, supported and controlled by the Charities Commission. The dataset contains boundaries of each Millennium Green, digitised against Ordnance Survey MasterMap, using the original hand-drawn plans as the source.
Labelling Convention	Name of Millenium Green
Definition	Polygon data. Individual Doorstep Green boundaries.
Domain of Use	England
Owner	Natural England
Version	
Version Date	30/09/2008
Parent	Not Applicable
Child	Not Applicable
Responsible Authority	Natural England
Frequency of Supply	Irregular
Source	Hand drawn site maps from local communities or from applicants for the scheme
Scale	Large scale but mostly 1:1250
Data Capture Process	Heads up digitising
Quality	A subset was checked by eye for connectivity with some automatic checks carried out on the dataset as a whole
Positional Accuracy	The same as the main reference source, OS MasterMap.
Precision	Data captured with co-ordinate precision of 1 metre
Measurement	Spatial (from extent of feature)
Unit of Measure	Hectares
Dimension	Area
Other Information	
Comments	

- The website will either allow you to download the dataset directly, or, it will redirect you to the relevant organisation where you can access the data.
- It will also display metadata for the dataset.



Interactive Map



Map Tutorial



Dataset Info and Download



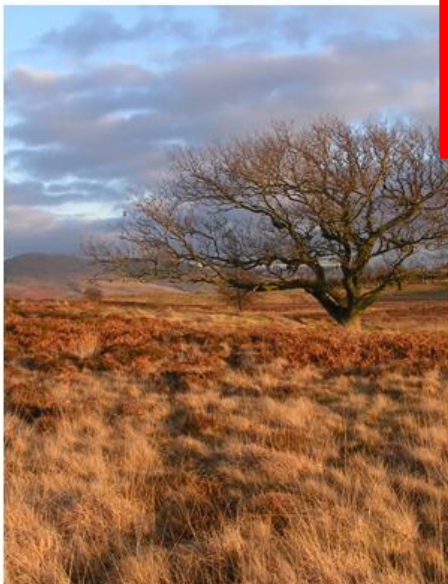
Static Maps



Training Manual



Work in Progress



Blanket Bog near Barbon in Lunesdale, Cumbria
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New BAP (Biodiversity Action Plan) Habitat datasets added

See [What's new](#).

The MAGIC website also contains an interactive map where you can view all the datasets via an interactive map window...



New user of MAGIC?
Demonstration Map | Map Tutorial

Last Update: Wednesday 7 October 2009
[Updates to Interactive Map](#)

Note: Each dataset in MAGIC has its own version date which can be viewed in the [dataset information](#).

Step 1. What data do you wish to view? You can select to view any of the 9 different map topics, or design your own from the list of layers available. Most topics cover England only. Please click [here](#) to see which topics have GB coverage.

Rural Designations - Other

Step 2. Where do you want to go? Note: Certain data layers will not appear at all map scales - click for [more information](#).

- Postcode
- Place
- Full Grid Ref - x,y
- Grid Ref - AB12(3)45(6)
- Latitude, Longitude
- County
- Government Region
- England
- Great Britain

North East

I Agree to the [Terms of Use](#) of the MAGIC website.

To ensure you load the most recent version of the Interactive Map (Wednesday 7 October 2009) press CTRL and F5 together (Internet Explorer) or CTRL and R (Netscape) when the map begins to open. You should only need to do this once. If you still have problems opening up the interactive map please refer to the [Frequently Asked Questions](#) page.

Note: The supported web browsers for the Interactive Map are Internet Explorer version 5 and later, Netscape Navigator version 7 and later and Firefox 1.04. Your screen resolution should be set at 800x600 pixels or higher.

Choose a topic and geographical location, e.g. Rural Designations and the North East region (or create your own) then select 'Open Map'...



Site Map Close

Search Options Map Tools Change Map Topic

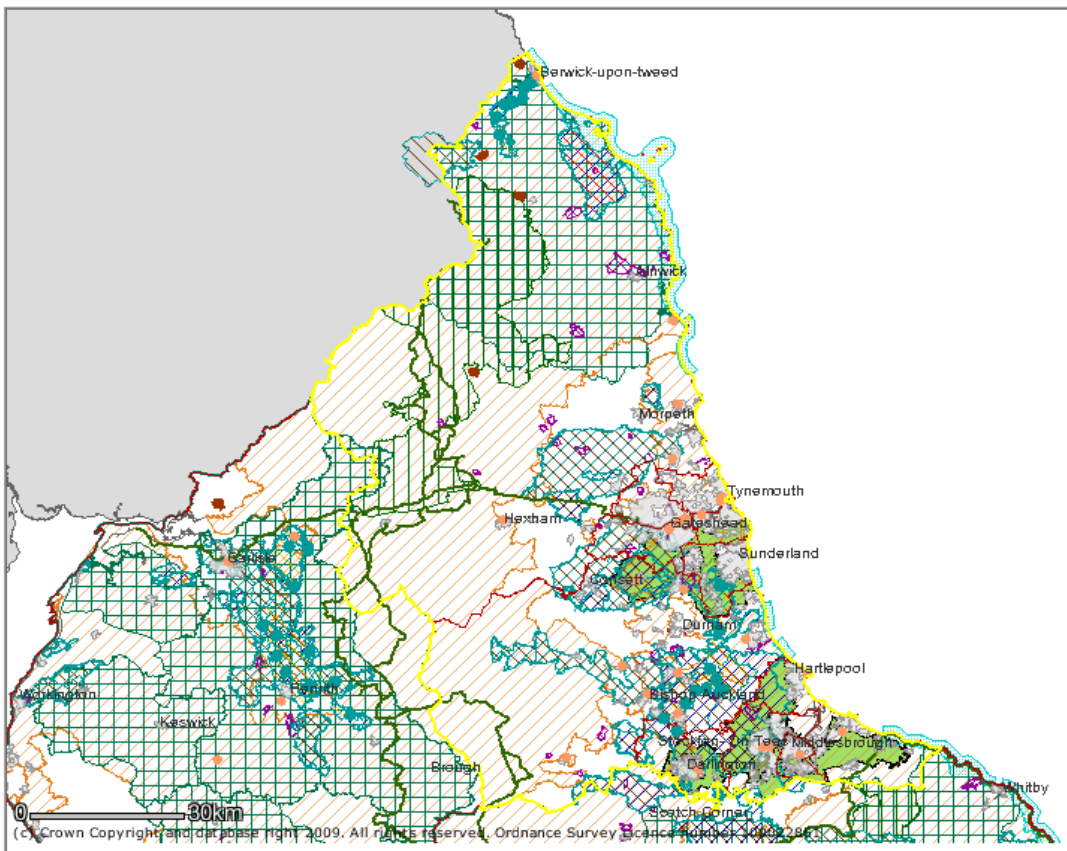


Reload Map



List of Layers

- Selected Features
- Walking The Way To Health Initiative (England)
- Groundwater NVZ - Monitoring Data (England)
- Counties, Metropolitan Districts and Unitary Authorities (England)
- NUTS1 - Government Office Regions (England)
- Urban Areas (England)
- National Trails (England)
- Nitrate Vulnerable Zones (England)
- EXISTING NVZ
- NEW NVZ
- Eutrophic Water NVZ (England)
- Groundwater NVZ (England)
- Surface Water NVZ (England)
- Registered Battlefields (England)
- Registered Parks and Gardens (England)
- Land Management Initiatives (England)
- Catchment Sensitive Farming Delivery Initiative 2006-2009: Priority Catchments (England)
- Upland Experiment Areas (England)
- Heritage Coasts (England)



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Scale: 1:1095102 Go



Other sources for Geographic Information

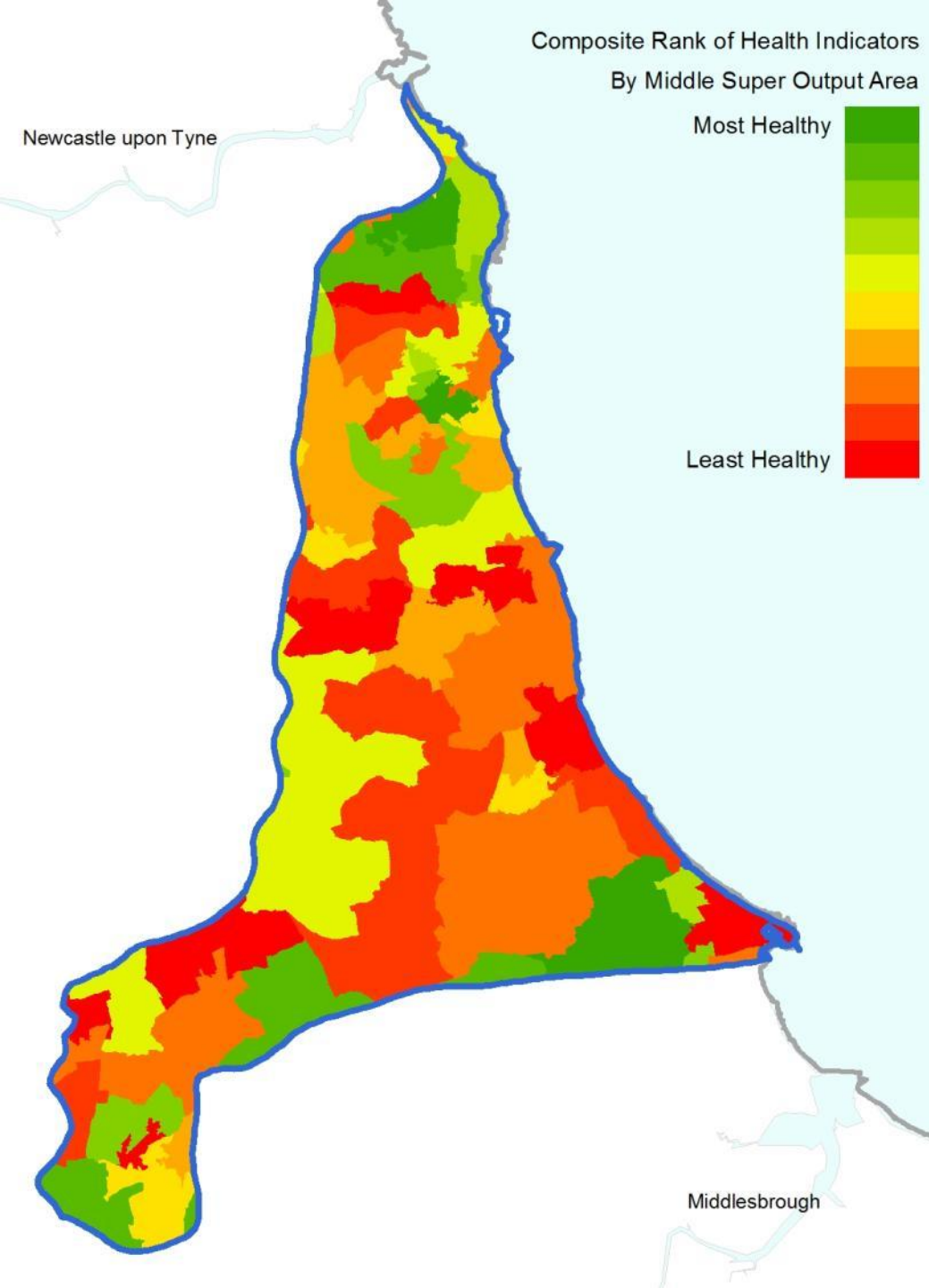
- Office for National Statistics www.statistics.gov.uk
 - Indices of Multiple Deprivation
 - Data on Population, Environment, Crime, Health etc
- Natural England (data not available from the web)
 - Higher Level Stewardship Target Areas
 - Composite Health Indices
 - Integrated Access mapping data
 - PPG17 Greenspace data for Durham Magnesian Limestone Plateau area
- EYE Project (Exploring Your Environment) www.eyeproject.org.uk
 - Species data
- Local Authorities etc.

A case study. Limestone Landscapes

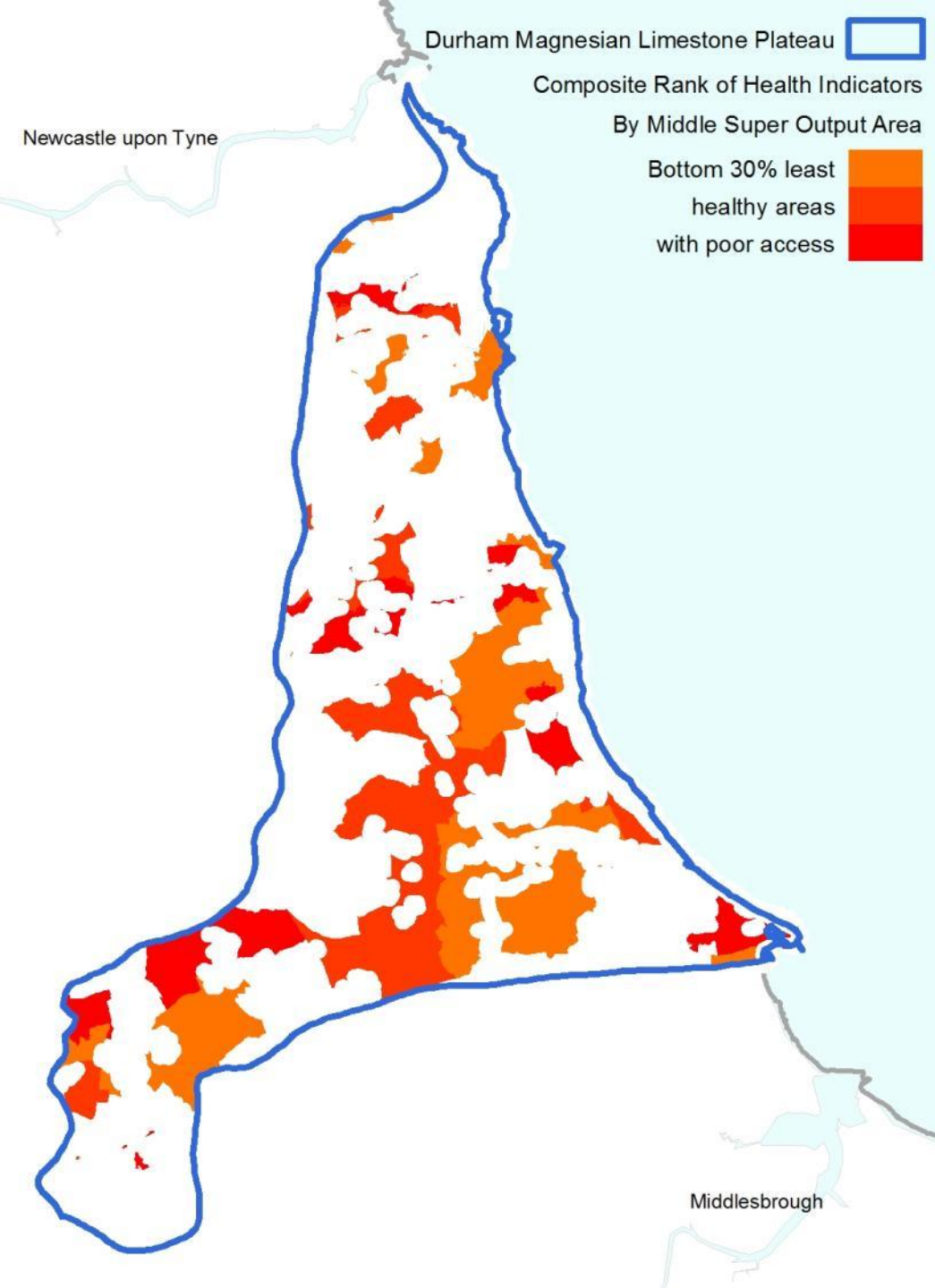
- As an example of how GIS data can be used to inform regional or local strategy we looked at how we could identify priority areas for the provision of natural accessible greenspace.
- This was done by using the following datasets...
 - Accessible Greenspace Audit data (for the Limestone Landscapes area)
 - Composite Health Indicators
 - Limestone Landscapes area boundary



- Accessible natural greenspace mapped through the Limestone Landscapes Green Space Audit.
- A 300m buffer has been applied to all green space over 2ha, according to ANGST standards.
- White space represents areas that do not currently meet the required standard.



- This map represents a composite rank of health indicators across the Limestone Landscapes area.
- Middle Super Output Areas (MSOA) have been grouped into deciles and ranked according to the following indicators...
 - Life expectancy (SEPHOS)
 - Circulatory Disease mortality (SEPHOS)
 - Obesity (SEPHOS)
 - Physical Activity (Sport England)
 - Mental Health (ONS/NOMIS)



- Using a combination of the green space data and the 30% lowest ranking areas for health, we can start to identify potential areas for improvements to accessible natural green space.
- The red & orange areas represent the worst areas for health that currently do not meet the required ANGST standards.

Data sharing, a few key principles

- Share our knowledge and data wherever possible, whilst conforming to data protection and licensing issues.
- Work together, particularly on cross border issues between neighbouring authorities.
- Ensure our Geographic Information has associated metadata.
- Strive for regional consistency in the data we create and use.
 - Using best practice
 - Avoid duplicating effort or re-inventing the wheel.
 - Talk to one another.



Contact details

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