

## Applying Climate Just in Greater Manchester

*New Economy and Salford City Council for the Greater Manchester Spatial Framework*



*Manchester skyline from Salford © M. Peverill*

### 1. SUMMARY

New Economy, the Greater Manchester Combined Authority's policy and research arm, embedded data from Climate Just into their bespoke local interactive mapping system 'MappingGM', and made this combined data available to the public. The combined mapping layers were also used to assess the climate vulnerability of over 1,000 sites that were submitted as potential development sites for the Greater Manchester Spatial Framework. The overall objectives were not to reduce social justice and vulnerability directly, but rather to consider data on flood exposure and vulnerability themes as part of the suite of factors which influence development decisions.

### 2. ACTIVITIES

Spatial planning officers across Greater Manchester were alerted to Climate Just in 2015 by colleagues who had attended Climate Just events and appreciated its potential applications.

After investigating the layers of data available from Climate Just they identified several layers of interest that they did not have access to locally, including surface water flooding and some flood zones that were not open-data at the time. Officers downloaded the 'shapefiles' (file type used in a GIS or geographical information system to store geospatial data) available from the Climate Just map tool and integrated them into MappingGM, a website and interactive mapping system developed in 2014 by New Economy and Salford City Council for the GMCA.

Residents and developers across Greater Manchester were invited to identify sites that may be suitable for housing or employment land development, as part of the process for the Greater Manchester Spatial Framework (GMSF), the area's long term spatial plan. Sites could be submitted for assessment through Mapping GM.

Working with planners from across Greater Manchester, New Economy identified a range of datasets (from their own sources and from Climate Just) that were crucial to analysing the sustainability and vulnerability of submitted potential development sites.

All these spatial data sets were collated onto Mapping GM. These datasets were then used to run over 200 spatial queries on over 1,000 submitted sites.

“The whole point of the MappingGM map tool is to help planners across GM assess in a consistent way for their local authority” says Chris Pope from New Economy “As soon as we add in another layer we can just rerun the queries again for about 1,000 sites across GM.”

### 3. OUTCOMES

Within this process the Climate Just data allowed planning officers to identify what proportion of each submitted site was within each MSOA (Middle Super Output Area), and the likely vulnerability of those sites to climate change impacts. The summation of all these spatial queries allows the planners to properly assess the submitted sites and give an overview of their potential for use as employment or housing sites.

### 4. BARRIERS

No barriers were experienced in accessing and downloading the data layers, integrating it into Mapping GM, or running the queries. However, this work was carried out by officers experienced in the technicalities of using GIS systems.

### 5. GUIDING PRINCIPLES

- Making data ‘open’ to the public and developers via mapping sites such as MappingGM helps increase transparency and engagement in the planning process.
- Climate Just data can be used to supplement local data sources, increase the power of local mapping tools, and aids consistency in assessment.
- It is beneficial if work on exporting and combining data is led by officers experienced in GIS systems and analysis.

### 6. LINKS

MappingGM <http://mappinggm.org.uk>

MappingGM is a mapping portal, visualising spatial information on a series of maps. It was originally developed in 2014/15 to create a map of social and physical infrastructure across Greater Manchester, but has since expanded to focus on planning, housing, environmental, social, economic and demographic data.

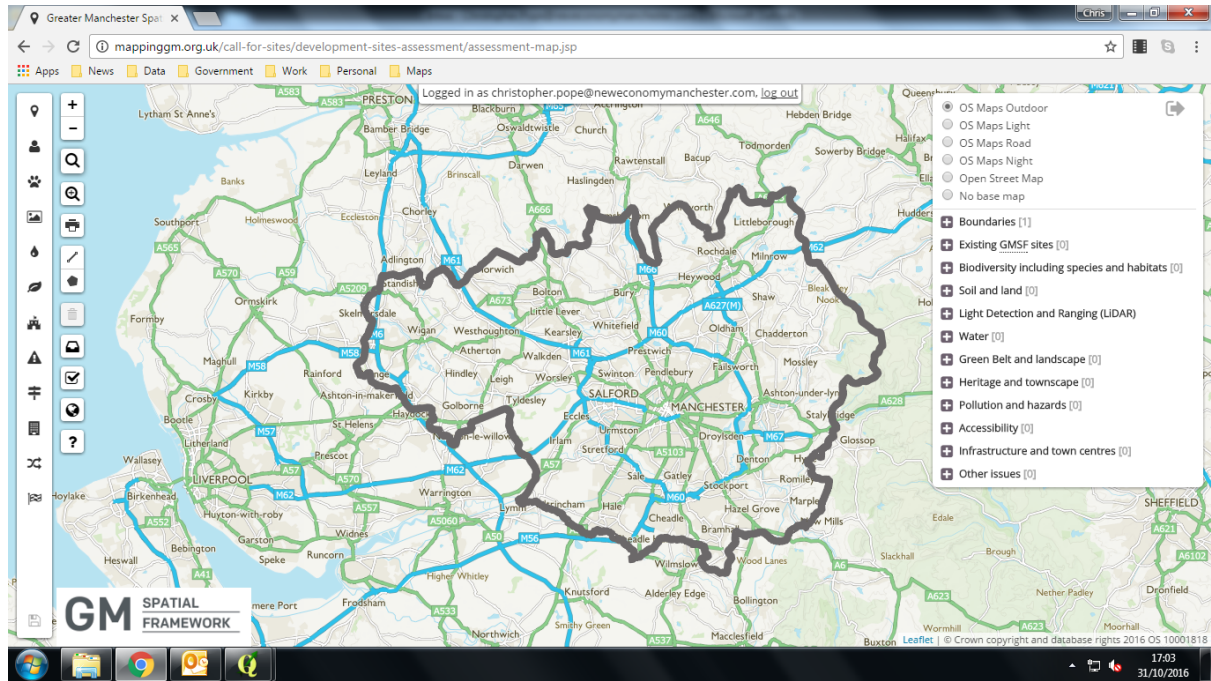
### 7. CONTACT

Chris Pope, Spatial Data Analytics Manager, New Economy

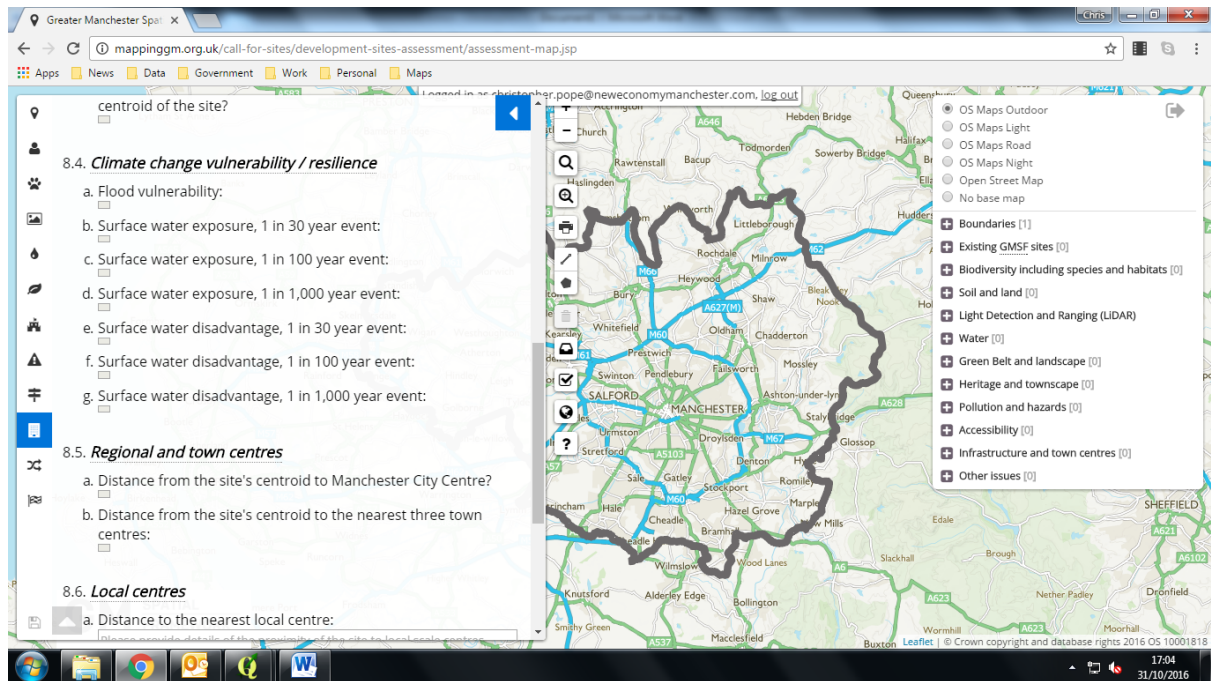
[Christopher.Pope@neweconomymanchester.com](mailto:Christopher.Pope@neweconomymanchester.com)

SCREENSHOTS OF MAPPING GM IN USE

1. The standard mapping view provided by Mapping GM, using Ordnance Survey background maps



2. Example of a typical query run using Climate Just data



## 3. Queries run on a particular site

### 8.4. Climate change vulnerability / resilience

- a. Flood vulnerability:  
Average / Relatively high / Relatively low
- b. Surface water exposure, 1 in 30 year event:  
Average / Relatively high
- c. Surface water exposure, 1 in 100 year event:  
Average / Relatively high
- d. Surface water exposure, 1 in 1,000 year event:  
Average / Relatively high
- e. Surface water disadvantage, 1 in 30 year event:  
Relatively high / Relatively low
- f. Surface water disadvantage, 1 in 100 year event:  
Average / Relatively high / Relatively low
- g. Surface water disadvantage, 1 in 1,000 year event:  
Extremely high / Relatively high / Relatively low

## 4. The MSOA vulnerability mapping data on GM

