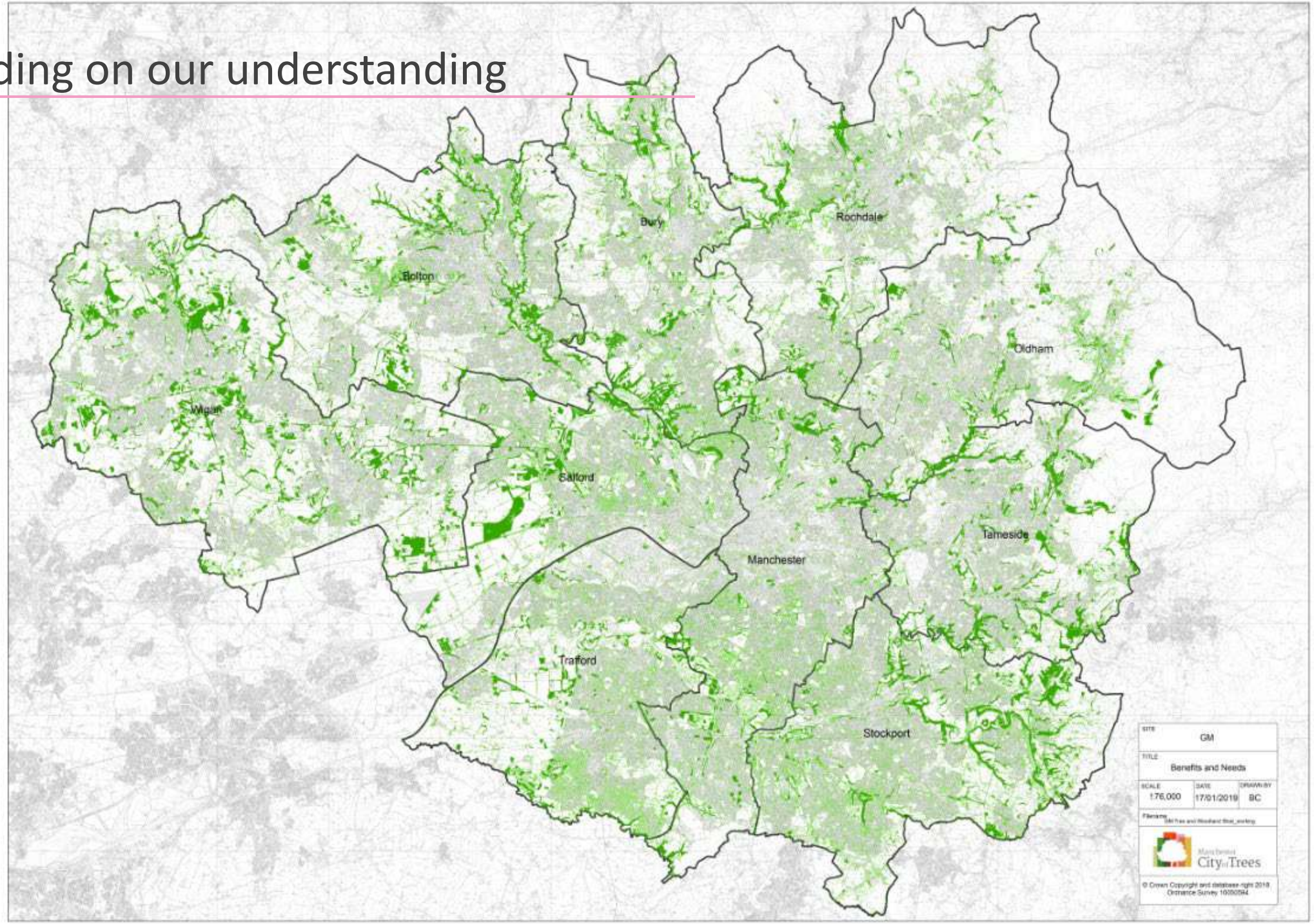
Manchester City of Trees

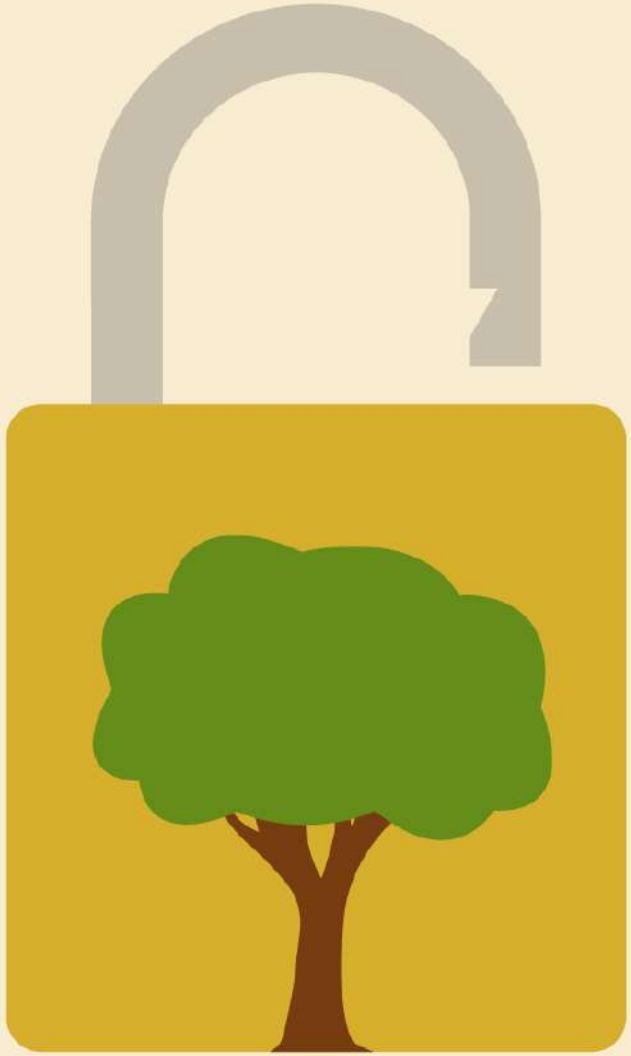
Growing more trees for Greater Manchester, UK

Building on our understanding



Greater Manchester's trees sequester **56,530 tonnes** of carbon each year.

The current carbon storage of all trees is **1,573,013 tonnes.**



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Trees in Greater Manchester remove **847 tonnes** of pollutants from our air each year.

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Trees intercept **1,644,415m³** of stormwater runoff per year in Greater Manchester.

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Approx. **1 million trees** are in danger of being lost in Greater Manchester due to pests and diseases such as Ash Dieback and Horse Chestnut Bleeding Canker.

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Why Trees?

Trees and woods create healthier, happier communities, tackle climate change, reconnect our children to the natural world, and provide essential habitats for wildlife.

Improve our health and wellbeing

Build resilience – helping Greater Manchester adapt to climate change

Provide opportunities for education, skills development and volunteering

Enhance biodiversity by creating new habitats and wildlife corridors

Lock up carbon and help us meet Greater Manchester's carbon reduction targets

Reduce flooding and improve air and water quality

Boost Greater Manchester's image – attracting and retaining visitors, investors and key staff

Connect people to the nature on their doorstep

Learn more at: www.cityoftrees.org.uk/why-trees

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All Our Trees Opportunity Maps

- Our approach
- Introduce the opportunity maps
- Accessing the maps and data

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Defining In-Scope Benefits from Trees

Before starting, we needed to define which key benefits we could define spatially.

- Air quality improvements
- Local climate regulation
- Enhancing habitat and wildlife
- Improving health and wellbeing
- Improving place
- Water quality and flood management

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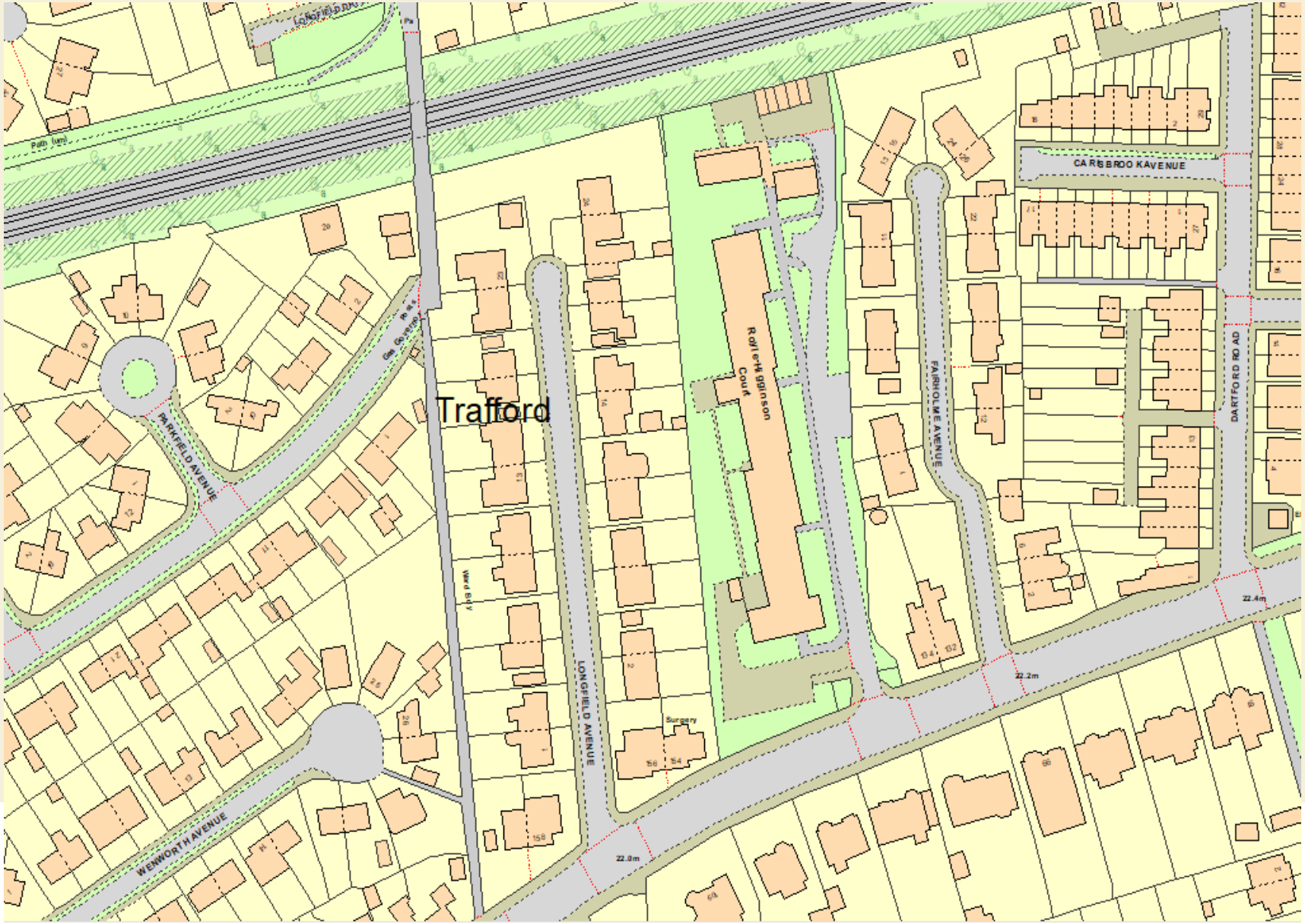
High Detailed Mapping

Ordnance Survey's Mastermap - Topographic Area maps out all the features of our urban landscape, right down to pavement scale.



Defining Plantable Land

Plantable land is defined as all parcels of land, greater than 7m^2 (sufficient to accommodate a tree-pit) excluding:

- Rail infrastructure
- Roads
- Buildings and structures
- Private gardens
- Existing woodland
- Historic Parks and Gardens
- SSSIs
- High Grade Agricultural Land
- Blanket Bog
- Airport and surrounding buffer

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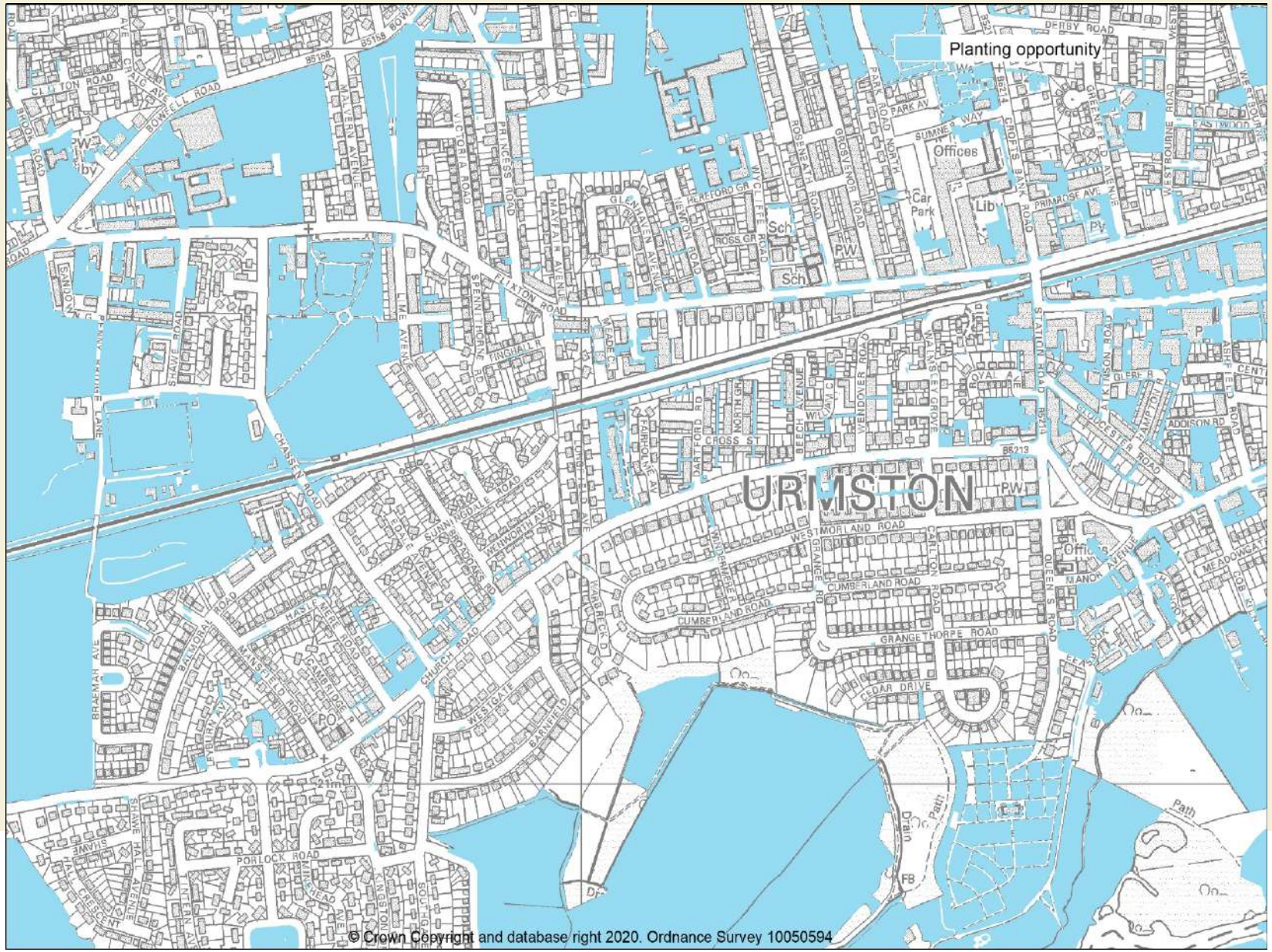
Defining Plantable Land

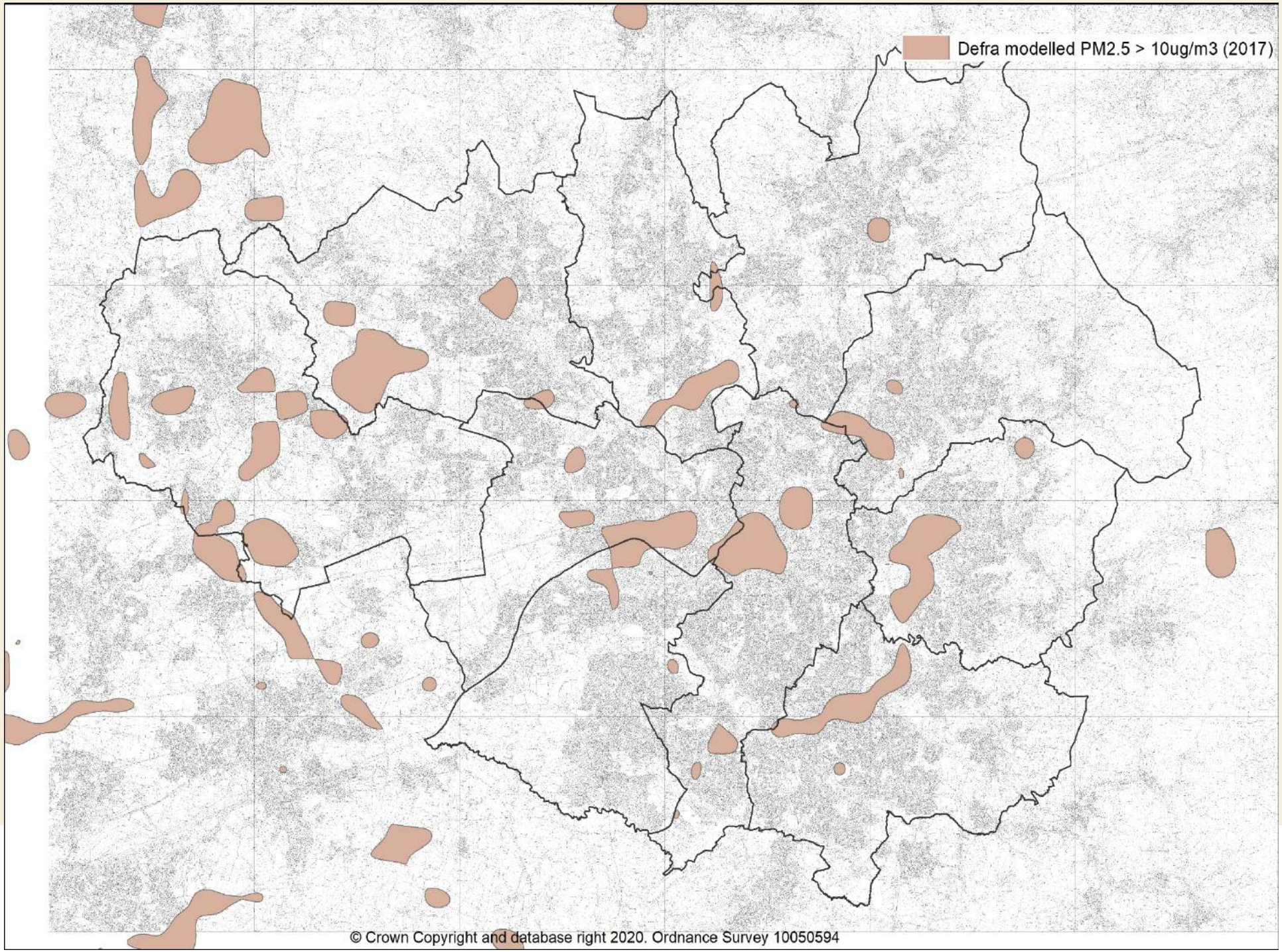
Plantable land does include some areas of hard landscaping such as car parks, public squares, and pavements – where wide enough.



Defining Areas of Greatest Need

Plantable land map was overlaid in turn with range of publicly available datasets that could describe areas of greatest need.

Ecosystem Service	Specific Indicator
Air quality improvements	• NO2 Exposure
	• Particulates exposure
Climate regulation	• Urban Cooling
Enhancing habitat and wildlife	• Near new development
	• Expand existing woodland
	• Stepping-stones/recovery networks
Improved Health Outcomes	• Active travel
	• Wellbeing
	• Recreation/physical activity
Improving Place	• Tree canopy deficiency areas
	• Development sites
	• Retail areas
	• Residential streets
Water quality and flood management	• Fluvial flooding and water quality - Catchment planting
	• Fluvial flooding and water quality - Riparian planting
	• Fluvial flooding and water quality - Floodplain planting



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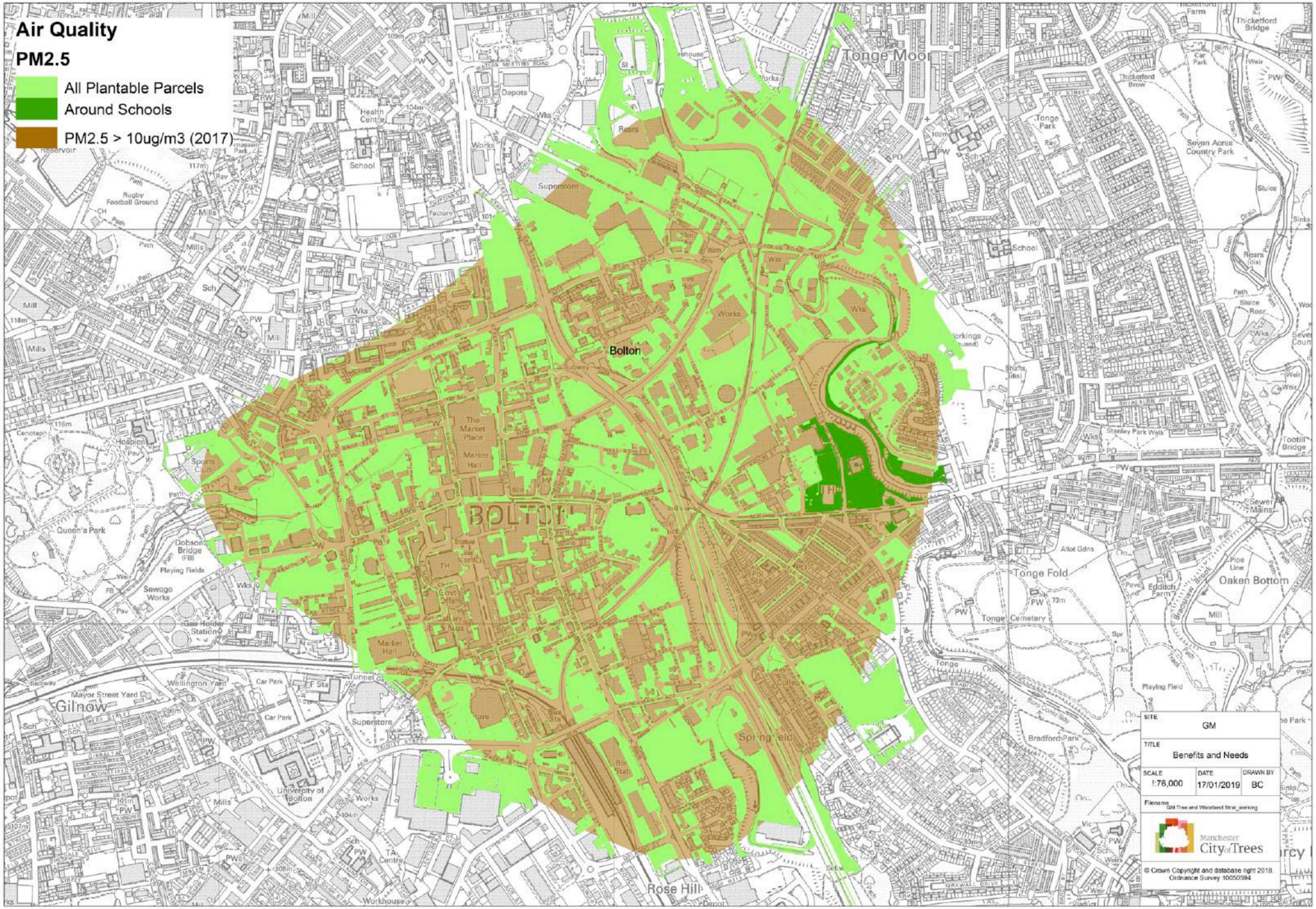
Air Quality
PM2.5
All Plantable Parcels
Around Schools
PM2.5 > 10ug/m3 (2017)
Bolton
BOLTON
Tonge Moor
Tonge Fold
Oaken Bottom
Gilnow
Rose Hill
Springfield
SITE
GM
TITLE
Benefits and Needs
SCALE
1:76,000
DATE
17/01/2019
DRAWN BY
BC
Filename
GM Tree and Woodland Strat_working
Manchester City of Trees
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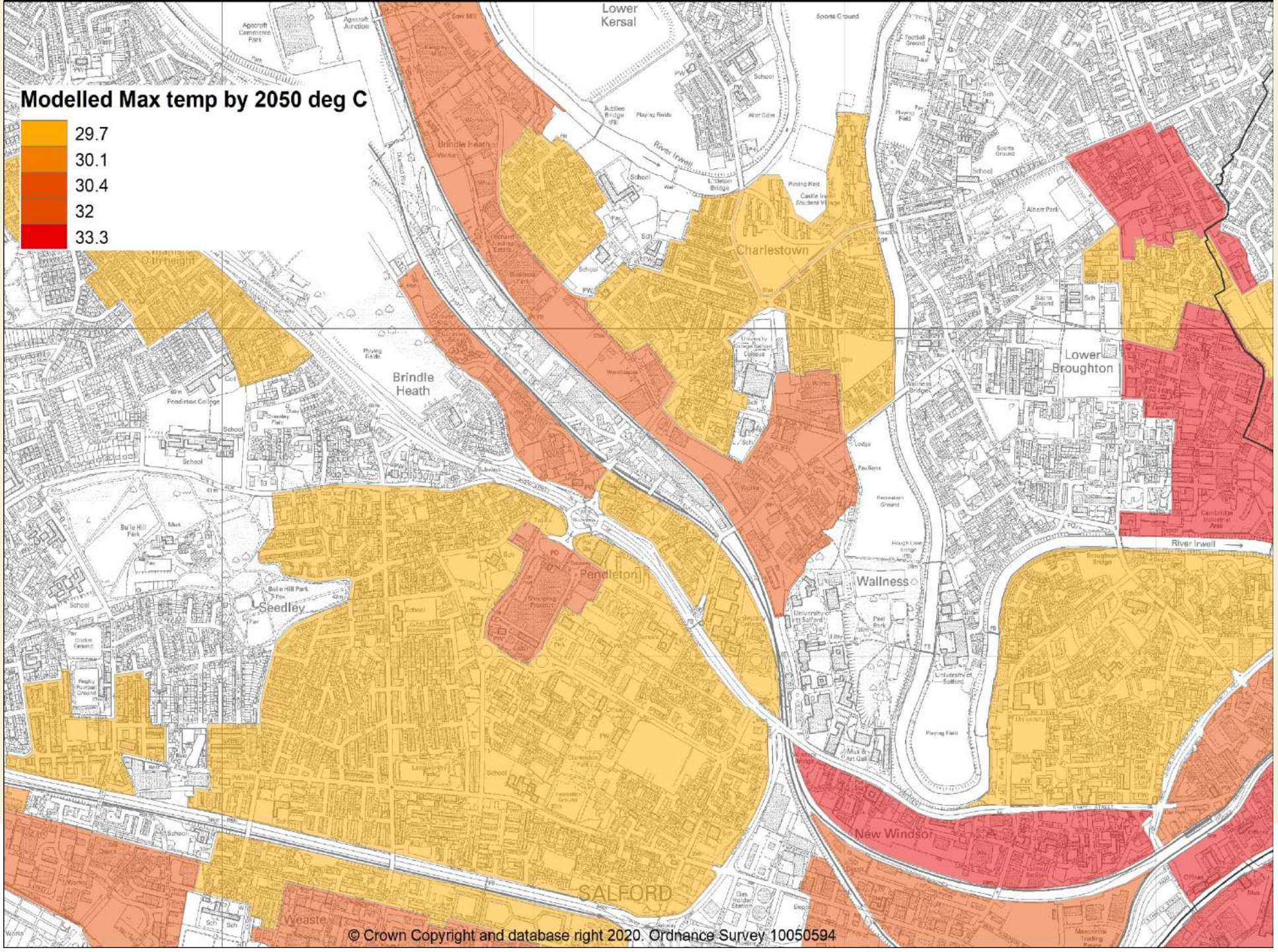

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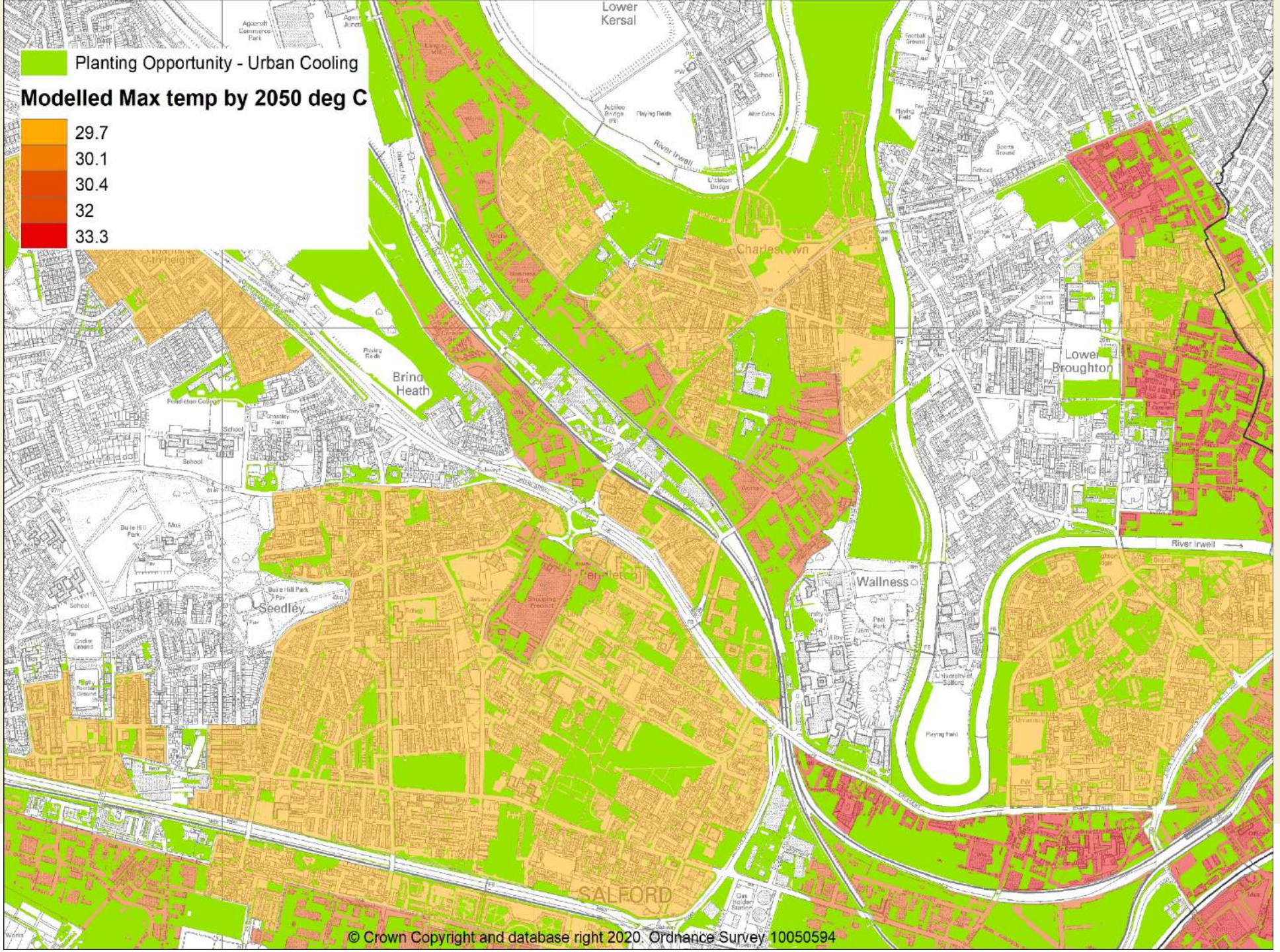

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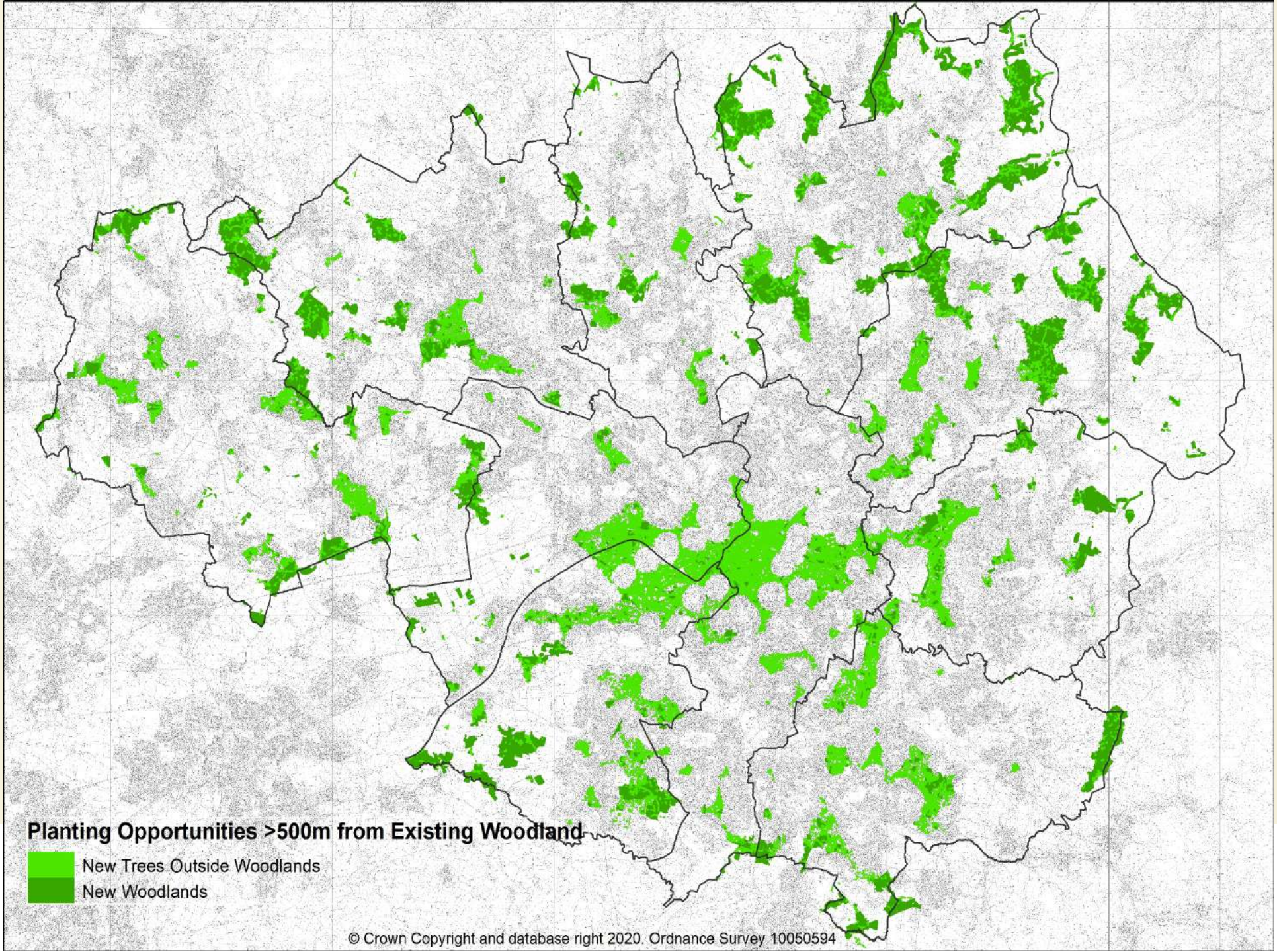

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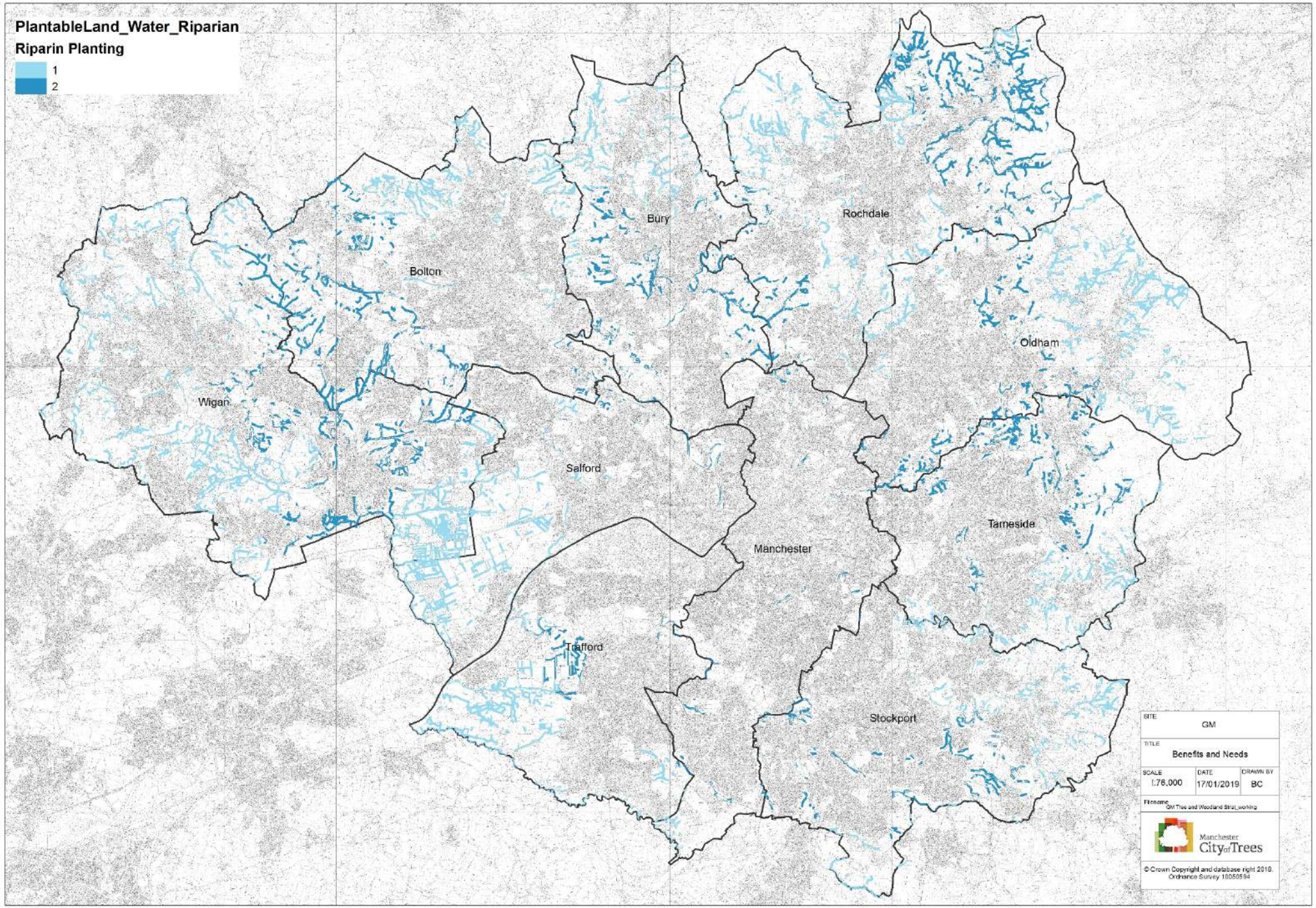

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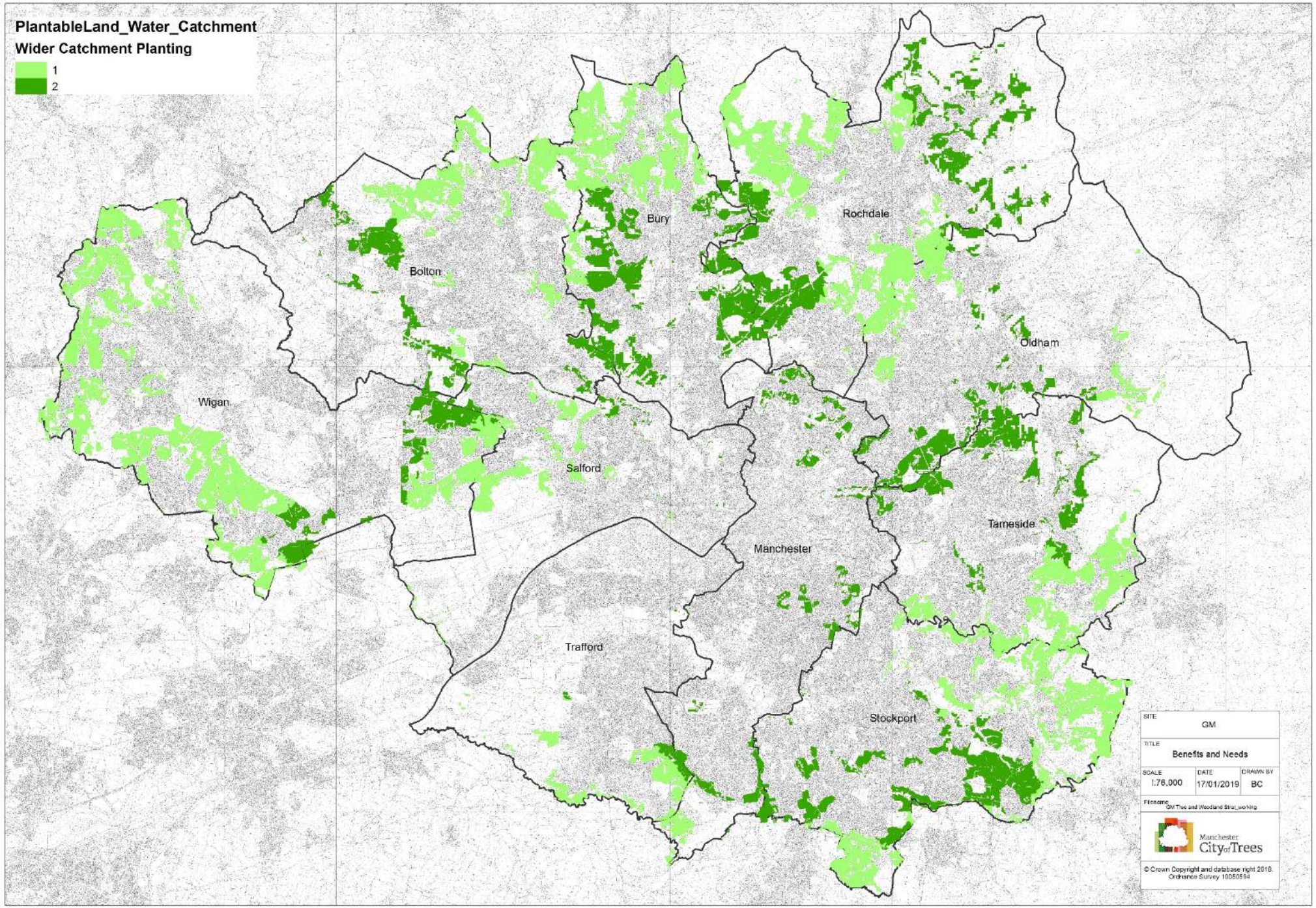

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Priority scoring

Each mapped parcel of land is scored for it's potential to meet need for each in-scope tree benefit.

Air_PM 2p5	Cooling	Biodiv_ Dev	Biodiv_ Exp	Biodiv_ Ste	Health_ Wel	Health_ Rec	Place_D efi	Place_D eve	Place_R eta	Place_R esi	Urban_ Swr	Urban_ RoFS	Priority	Shape_Area	>1ha	>0.5ha	>0.25ha
0	1	0	1	0	0	0	1	1	0	0	0	0	5	1010815.36541000000	yes	yes	yes
0	0	1	1	0	0	0	1	0	0	0	0	0	4	989463.33327600000	yes	yes	yes
0	0	0	0	2	0	0	1	0	0	0	0	1	5	899326.66489300000	yes	yes	yes
0	0	1	1	0	0	0	1	1	0	0	0	1	6	489314.12622700000	yes	yes	yes
1	1	0	1	0	0	0	1	0	0	0	0	0	5	399645.15336400000	yes	yes	yes
0	1	0	1	0	0	0	1	1	0	0	0	0	5	380869.99416900000	yes	yes	yes
0	0	1	1	0	0	0	1	0	0	0	0	1	5	380705.04704500000	yes	yes	yes
0	0	1	1	0	0	0	0	0	0	0	0	0	3	365572.71640100000	yes	yes	yes
0	0	0	0	0	0	0	1	0	0	0	0	0	2	359387.08729000000	yes	yes	yes
0	0	1	1	0	0	0	0	0	0	0	0	1	4	359081.62530900000	yes	yes	yes
0	0	1	1	0	0	0	0	0	0	0	0	0	3	327823.63942100000	yes	yes	yes
0	0	1	1	0	0	0	0	0	0	0	0	0	3	320917.30243200000	yes	yes	yes
0	0	1	0	2	0	0	0	0	0	0	0	0	4	319500.22728600000	yes	yes	yes
0	0	1	1	0	0	0	0	0	0	0	0	1	4	319185.87574300000	yes	yes	yes
0	0	1	1	0	0	0	0	1	0	0	0	0	4	318951.30843500000	yes	yes	yes
0	0	1	1	0	1	0	0	0	0	0	0	0	4	314970.45367900000	yes	yes	yes
0	0	0	0	0	0	0	0	0	0	0	0	1	2	311953.40557200000	yes	yes	yes
0	0	1	1	0	0	0	0	0	0	0	0	0	3	305643.40334000000	yes	yes	yes
0	0	1	1	0	0	0	1	0	0	0	0	0	6	303520.66818400000	yes	yes	yes
0	0	1	1	0	0	0	1	0	0	0	0	1	5	295870.91864700000	yes	yes	yes
0	1	1	1	0	0	0	0	0	0	0	0	0	4	293068.22120400000	yes	yes	yes
0	0	1	1	0	0	0	1	0	0	0	0	1	5	292047.50640800000	yes	yes	yes
1	0	1	1	0	0	0	0	0	0	0	0	0	4	288118.54789500000	yes	yes	yes
0	0	1	1	0	0	0	0	0	0	0	0	0	3	287800.51393500000	yes	yes	yes
0	0	1	1	0	1	0	0	0	0	0	0	0	4	284374.93311300000	yes	yes	yes

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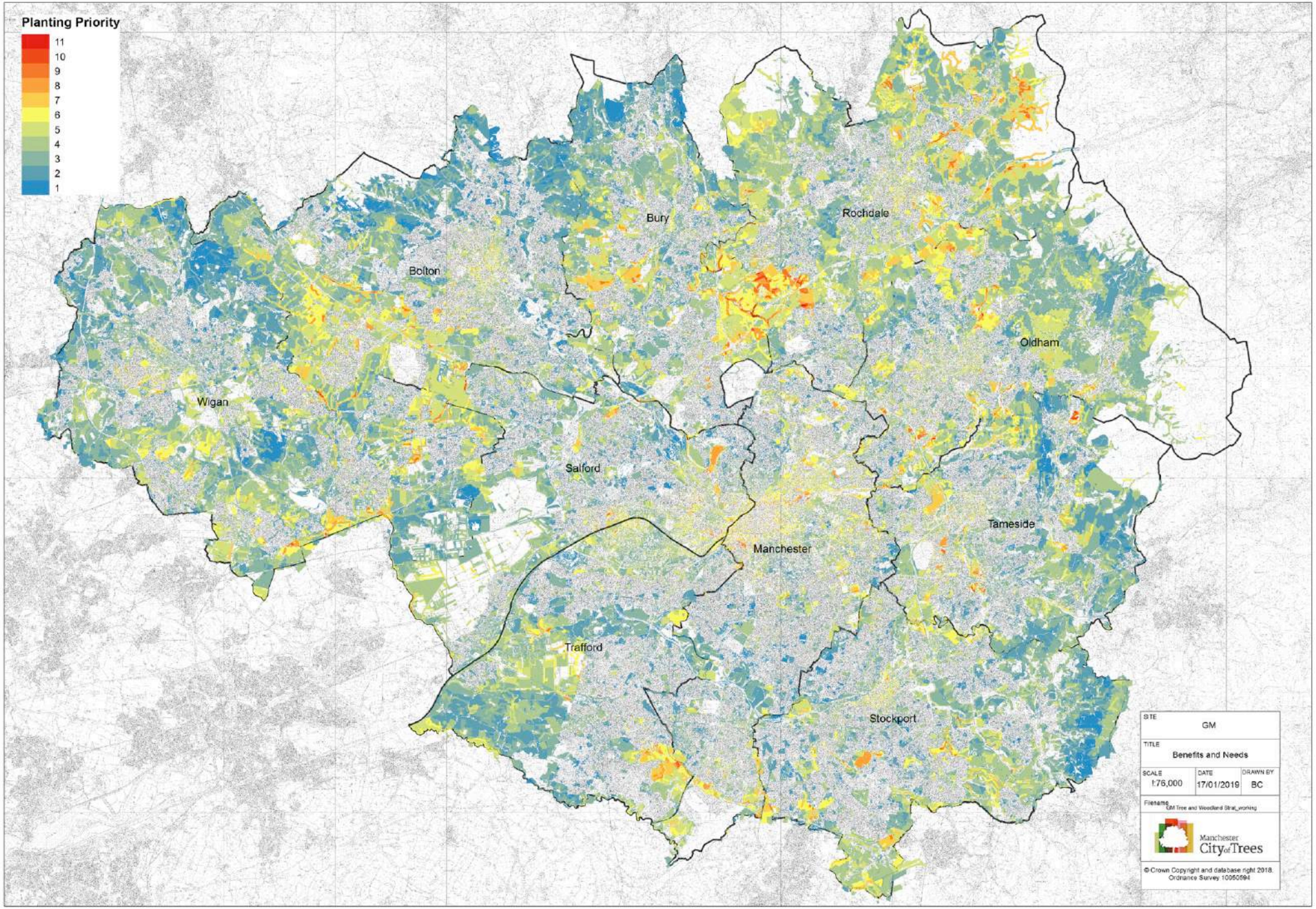

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Accessing the maps and data

While these maps are each presented in All Our Trees strategy document, they are most usefully viewed in a dynamic system allowing interrogation at all scales.

- Mapping GM - https://mappinggm.org.uk
- GIS

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GMODIN

An open map of relevant public and private infrastructure data.

View the map »

The Greater Manchester Open Data Infrastructure Map (GMODIN) makes use of existing local, regional and national datasets on a variety of topics — from open public sector and environmental assets to energy utility networks.

Learn more »

UPDATE 25/03/19: GMCA releases new Ecosystem Services opportunity layer

Greater Manchester Combined Authority has produced a new map showing ecosystem services opportunity areas across the whole of Greater Manchester. This dataset is the first city region-wide ecosystem services opportunity assessment.

You can access the Ecosystem Services opportunity layer in the 'Environment and Ecology' layer theme.

Suggest a change

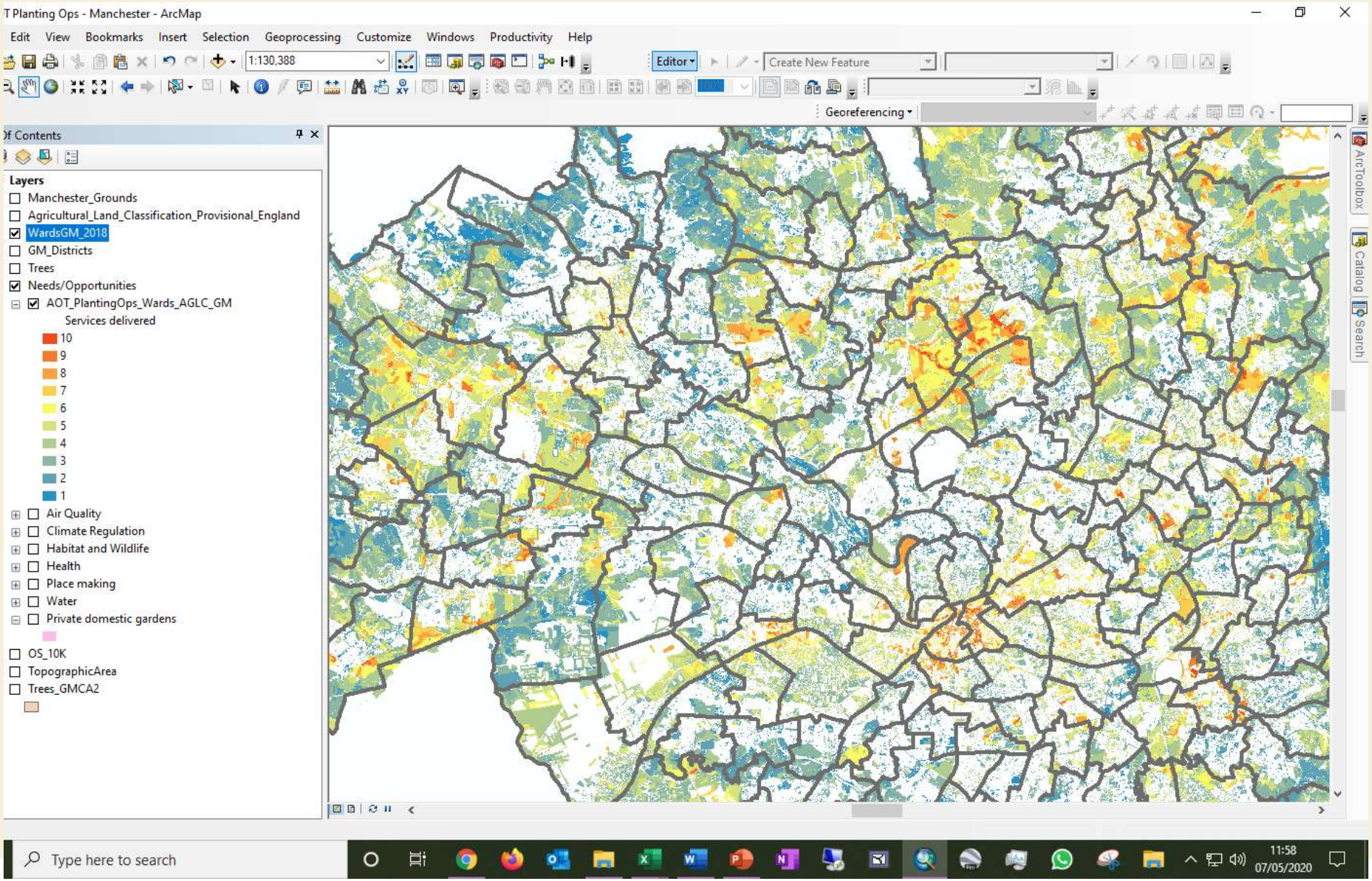
We are always on the lookout for new and useful data. If you would like to see any particular data visualised, please let us know via Twitter or via email.

Contact the team

If you have any queries, comments or updates to make regarding the map, then you can get in touch with our mapping team via email or via Twitter.

Inside a GIS

Allows for precise analysis of scale and priority of opportunities at specific geographies whether that be LA District, ward level, or within specific property boundaries.



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Social Housing Providers

To examine ways amenity green spaces could be better used to help improve environment and health of residents.

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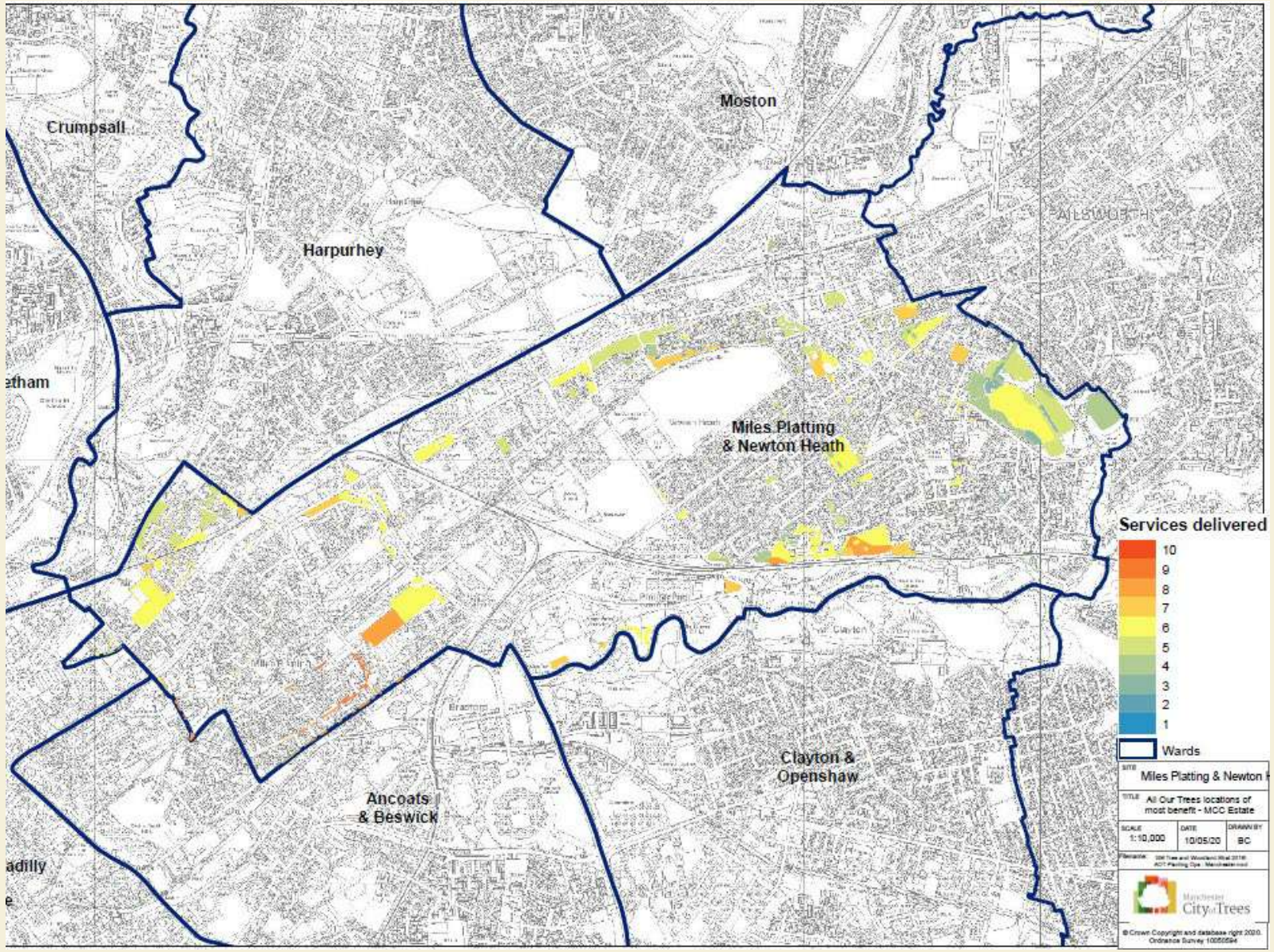
Local Authorities

To better understand opportunities on operational estate and develop local greenspace or tree strategies.



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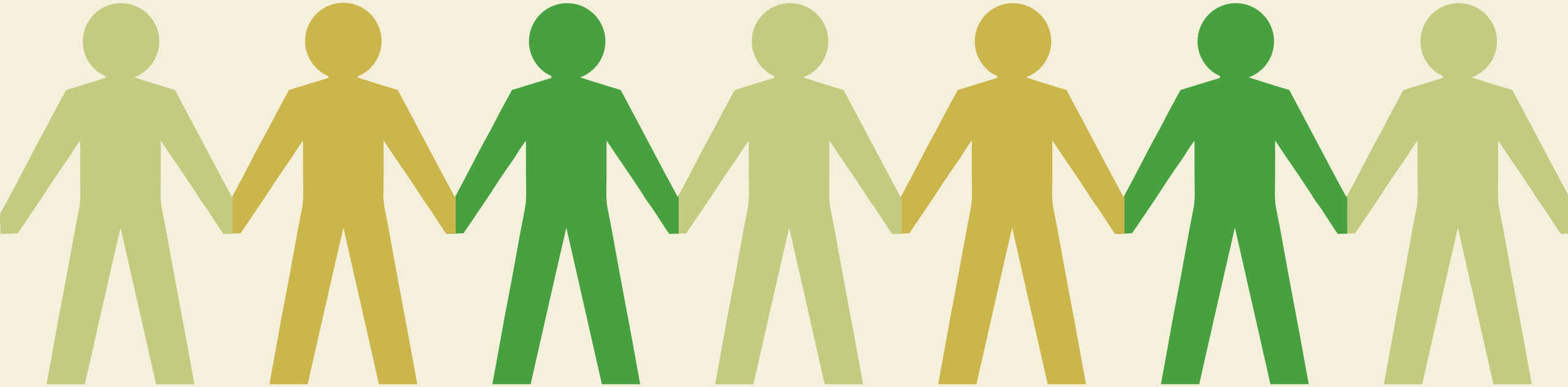
Who are the maps aimed at?

We developed these maps and underlying data to be used by a wide range of partners and stakeholders.



Developers

Planners and Development Managers

Landscape architects

Local Councils, GMCA and other government bodies

Landowners

Housing associations and RP's

Other Charities

Manchester City of Trees

Contact Us

To learn more about All Our Trees visit:

www.cityoftrees.org.uk

Find us on…

Community Forest Trust (CFT) is the charitable organisation that supports the delivery of the City of Trees movement. CFT is a non-profit making company limited by guarantee. Registered in England no. 3598556. Charity registration 1072706.

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