

# GlobalLeeds FORUM

Tree planting and its  
role in tackling the  
climate emergency



# GlobalLeeds





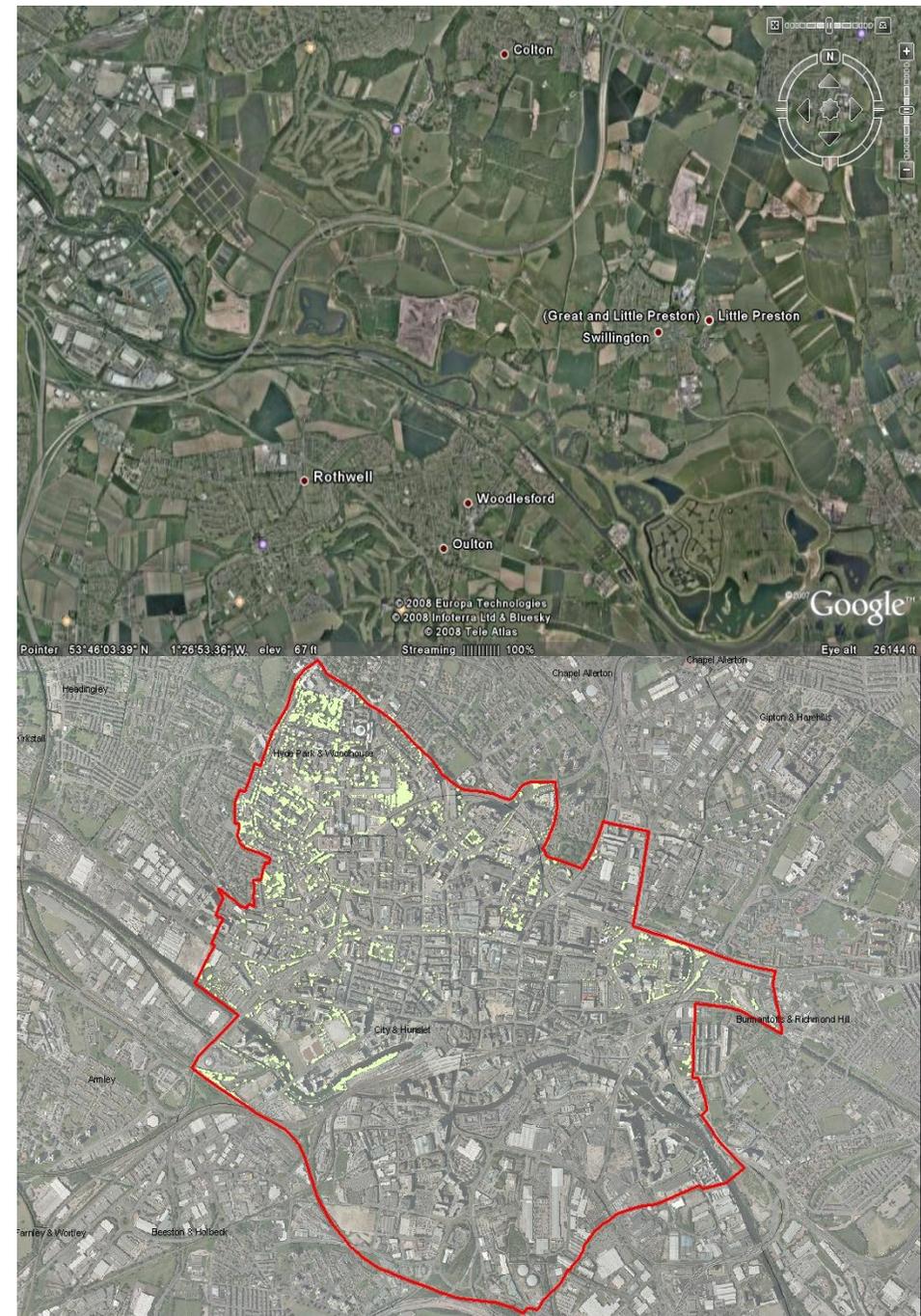
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# 1. Implementing a Carbon based tree planting strategy.

Glen Gorner, Natural Environment Manager, Leeds City Council

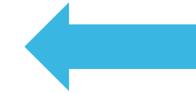
# Tree planting targets: Challenges.

- Mix of accessible urban trees and woodlands with increased rural planting. Includes the more challenging urban sites.
- Policy needs to catch up – “clear, stable and well-designed policies” (CCC, 2019)
- Identify the challenges and blocks to tree planting such e.g. Post Common Agricultural Policy and the transition to Environmental Land Management schemes.
- Ambition for 2021-25 – 30,000 ha then 30,000 ha/yr to 2050 – 1/3 in England. N.B 2019–20 only 2,330 ha in England. 13,460 ha for UK.
- Balance of other factors such as biodiversity, farming, landscape character, water quality.

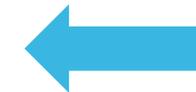




# Connecting landscapes.



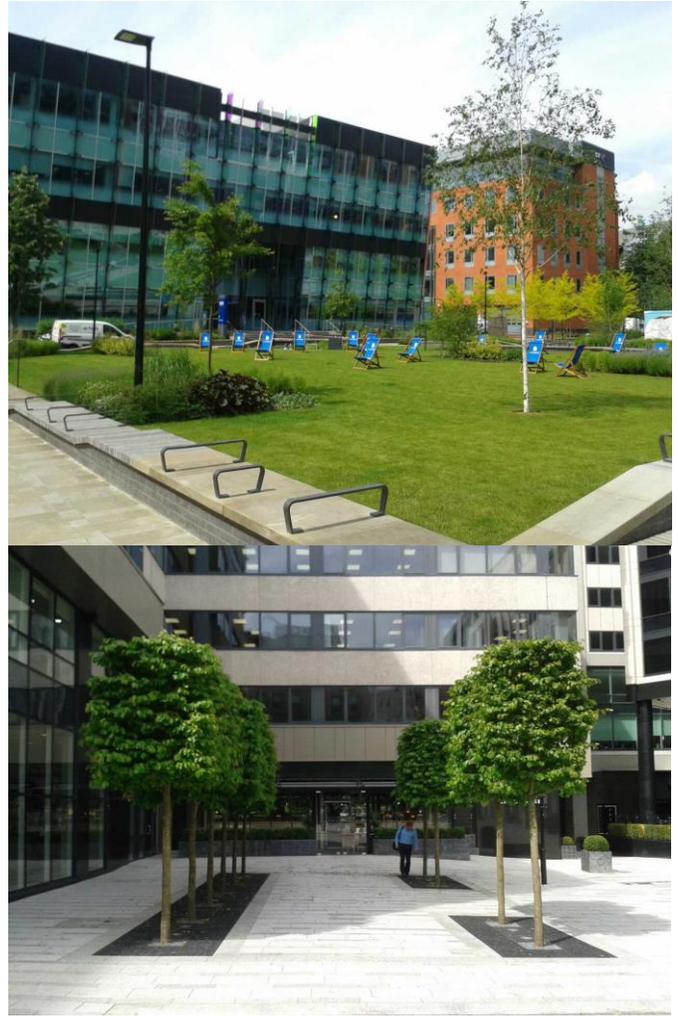
18<sup>th</sup> Century  
'Capability'  
Brown



1970's Post -  
industrial



2000 Post  
Industrial

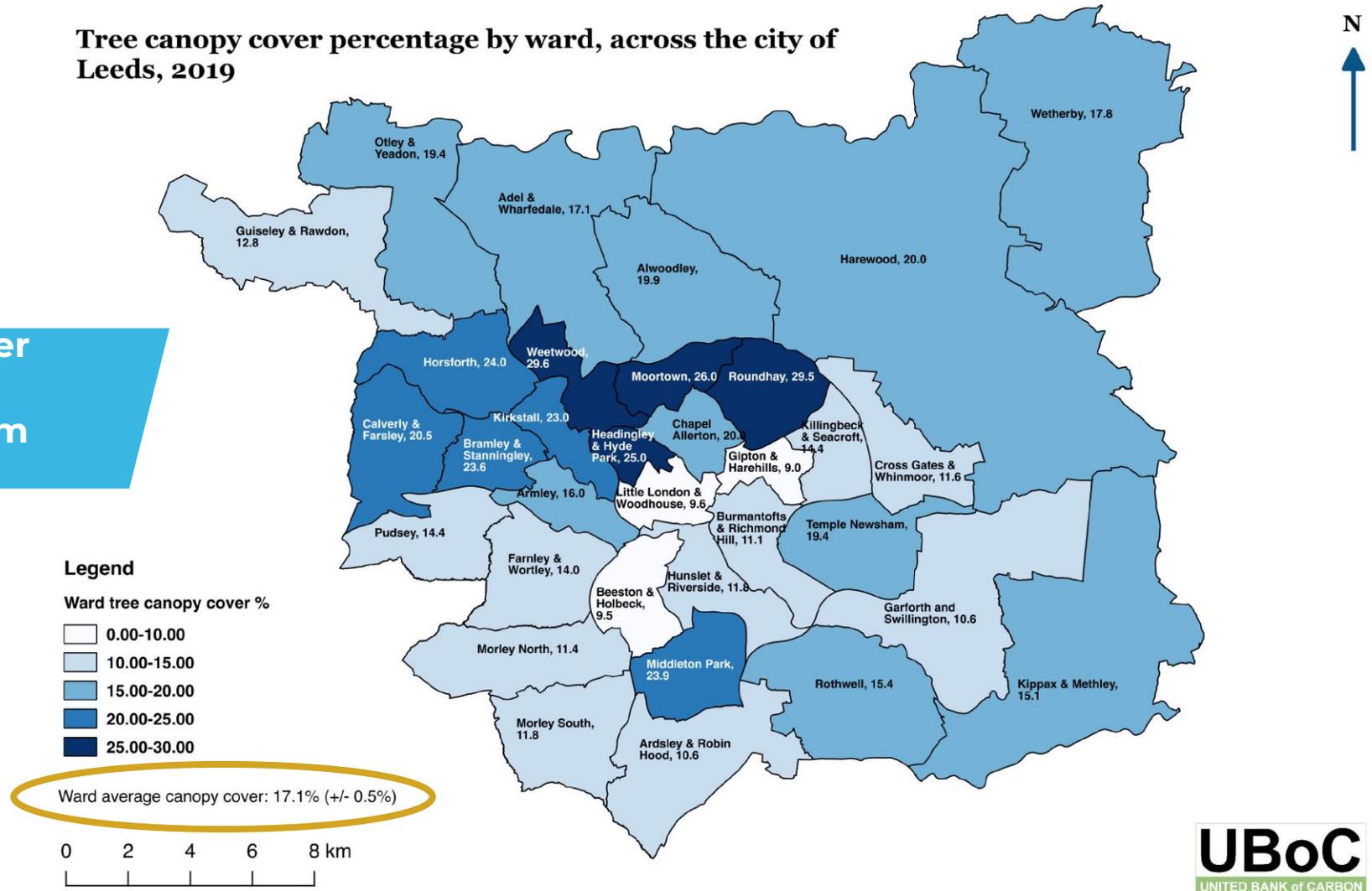


Trees need soil

# Other Leeds4trees projects.

Tree canopy cover percentage by ward, across the city of Leeds, 2019

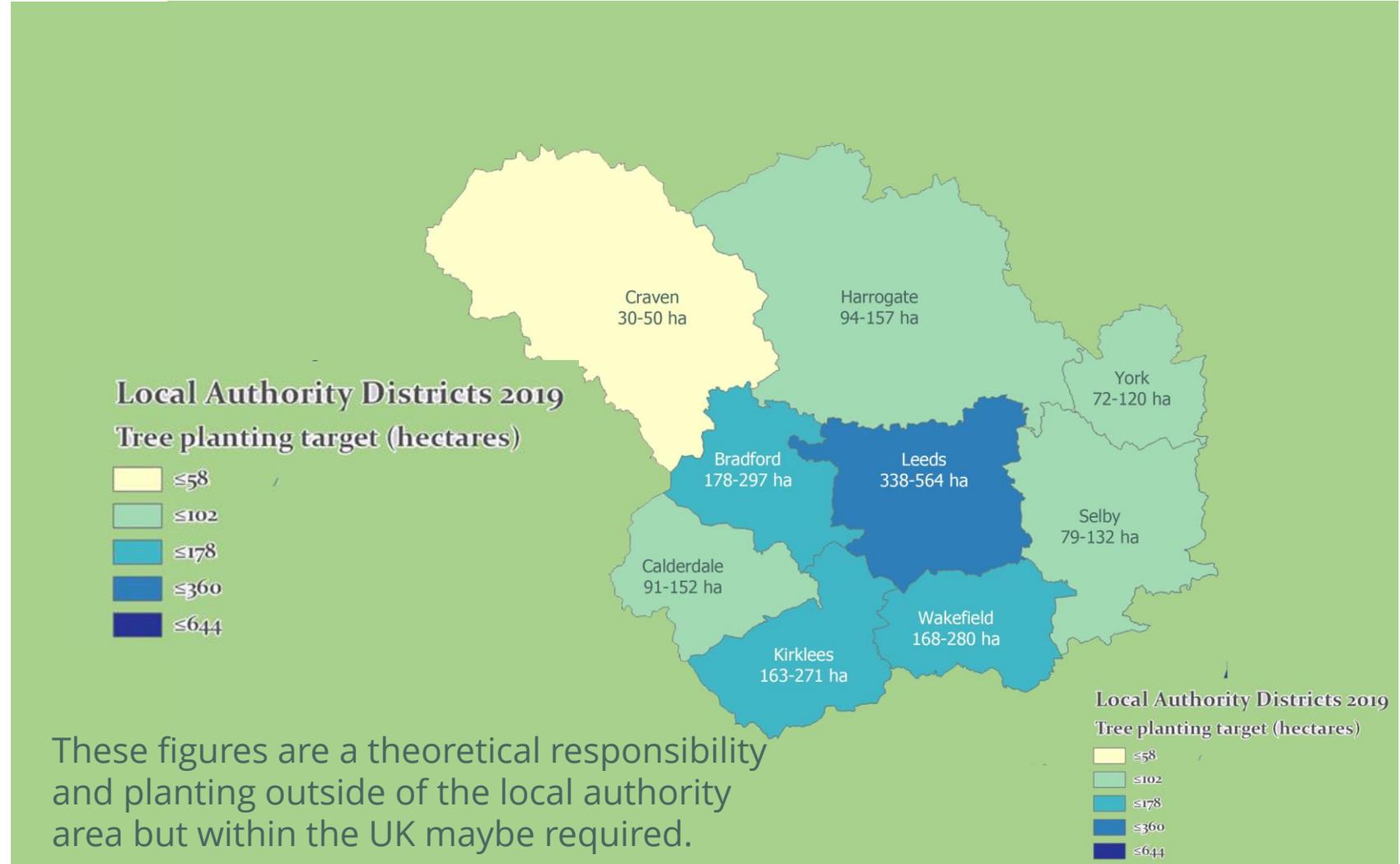
- Tree canopy cover 17.1%
- Wards range from 10% to 30%



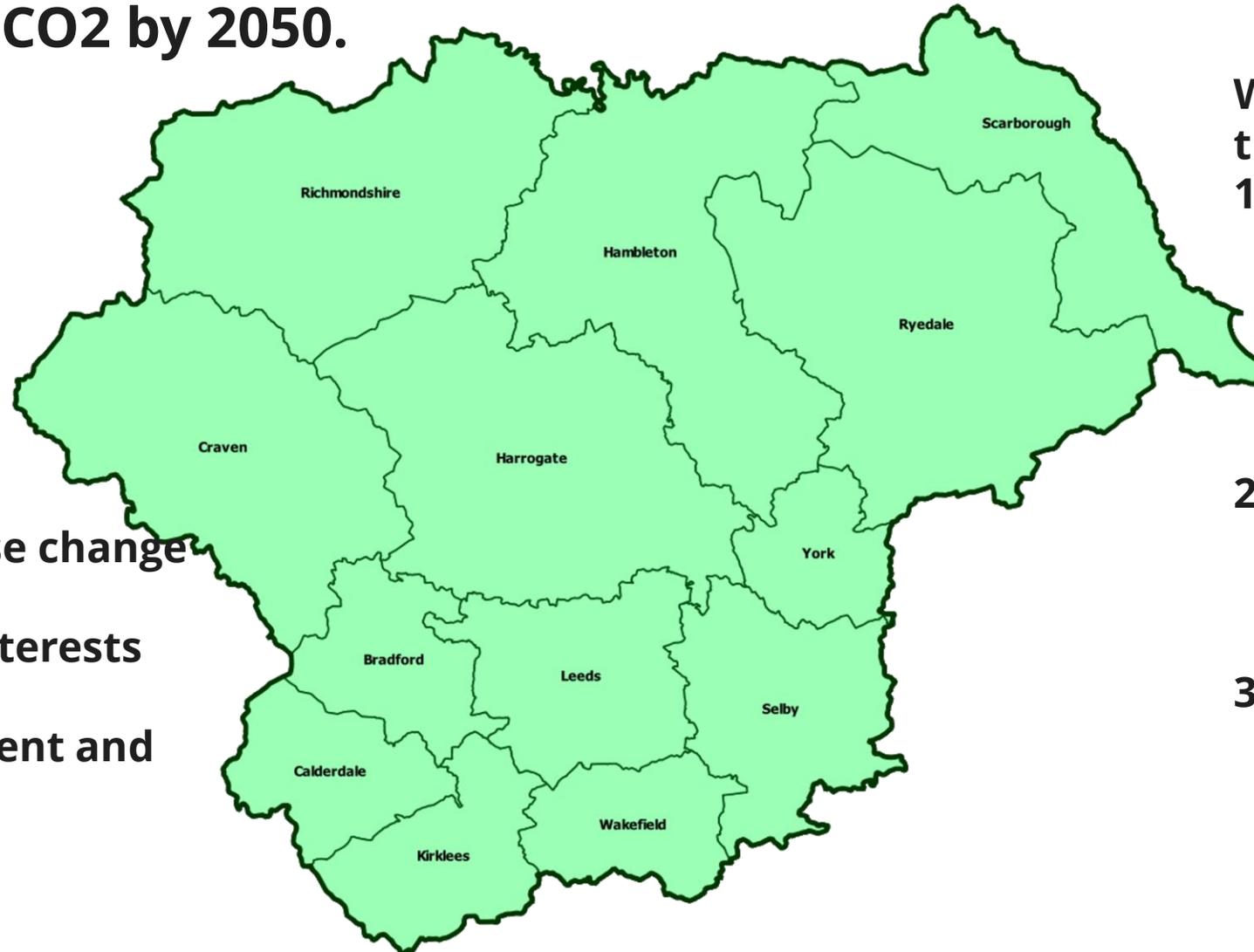
Copyright © Crown copyright and database rights 2017 apply. Reproduced under Ordnance Survey Licence number 100019567. Ward boundary shapefiles provided by Leeds City Council.

Figure 1. Map to show the estimated percentage tree canopy cover of Leeds wards. Canopy cover estimates calculated using surveys of 800 sample points per ward in i-Tree Canopy v6.1. Map produced using QGIS v2.18. Ward boundary shape-files provided by Leeds City Council.

# White Rose Forest districts tree planting targets based on emissions.



**Our understanding of the scale of tree planting across the whole of the WRF region is much more nuanced and reflects what each district might aim to implement to capture the appropriate amount of RESIDUAL CO2 by 2050.**



Long-term land use change is complex.  
A wide range of interests and stakeholders  
Careful management and support

WRF is structured to meet that challenge:

1. Supported by a Core Team, the WRF steering Group oversees and coordinates a range of specialist task and finish groups.
2. Local-authority led WRF District groups – lead on WRF District approach.
3. Design-led – uses a unique Delivery Pathway that allows a bespoke approach to meeting local needs.



# The challenge for Leeds.



LEEDS SCALE

- Current canopy cover = 17.1% (9,468 ha)
- Canopy increase to 33% (18,296 ha)
- Increase of 16% (8,828 ha) e.g. *approaching 300 ha per year*



PARKS &  
COUNTRYSIDE  
SCALE

- Area of land – 4,000 ha. This is 7% of City total (55,173 ha)
- TCC of P&C land = 39% (1,557 ha of woodland)
- Suggested canopy increase to 65% (2,807 ha). Increase of 1,250 ha over 25 years



# Sustainable supply of trees.



LCC Parks & Countryside are gearing up to sow and grow their own forestry planting stock.



Growing our own trees to provide 222,200 trees for planting each year



Over 5.5 million trees over 25 years.

# Sustainable supply of trees.

- Choosing the right tree for the right location is important
- 3 basic woodland planting mixtures have been identified:
  - 3 main lowland broadleaved woodland types found in the leeds area (w10, w16, w8)
  - The most common wet woodland type found in the leeds area (w6)
  - Woodland on re-claimed land
- Species choice informed by the national vegetation classification and ecological site classification



# Woodland planting guidelines

## Canopy species W10 community

- |  |  |
|--|--|
| <span style="color: yellow;">●</span> <b>Quercus robur</b><br>English oak    | <span style="color: blue;">●</span> <b>Tilia cordata</b><br>Lime             |
| <span style="color: orange;">●</span> <b>Betula pendular</b><br>Silver birch | <span style="color: cyan;">●</span> <b>Castanea sativa</b><br>Sweet chestnut |
| <span style="color: red;">●</span> <b>Acer pseudoplatanus</b><br>Sycamore    | <span style="color: brown;">●</span> <b>Prunus avium</b><br>Wild cherry      |
| <span style="color: purple;">●</span> <b>Alnus glutinosa</b><br>Alder        | <span style="color: grey;">●</span> <b>Populus tremula</b><br>Aspen          |
| <span style="color: darkblue;">●</span> <b>Taxus baccata</b><br>Yew          |  |

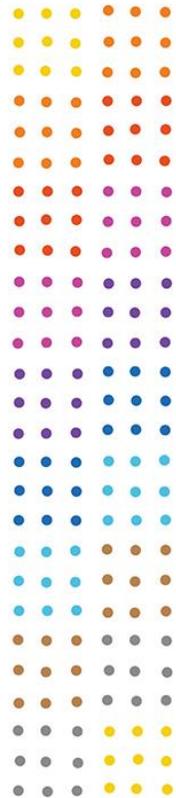
## Woody shrubs

- |  |
|--|
| <span style="color: brown;">●</span> <b>Malus sylvestris</b><br>Crab apple |
| <span style="color: yellow;">●</span> <b>Ilex aquifolium</b><br>Holly      |
| <span style="color: pink;">●</span> <b>Corylus avellana</b><br>Hazel       |
| <span style="color: teal;">●</span> <b>Crataegus monogyna</b><br>Hawthorn  |

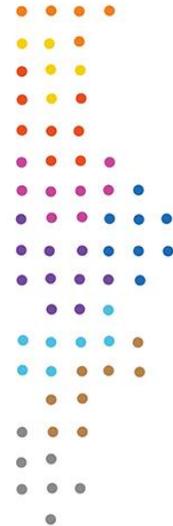
## Block planting

each dot represents 1 tree

**Regular planting** e.g. 3 x 3

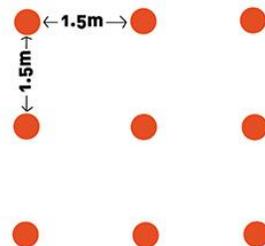


**Irregular planting** in groups of the same species

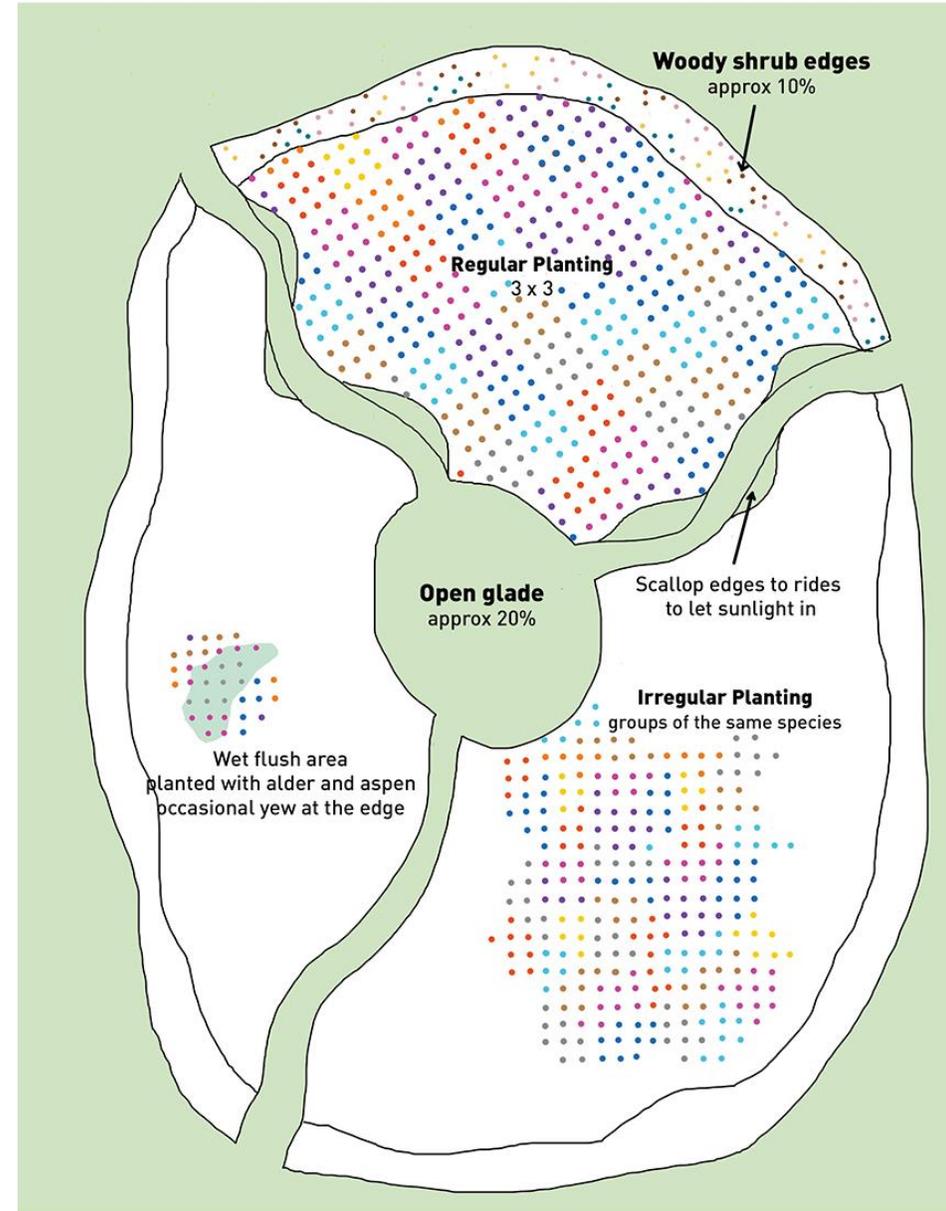


## Spacing

whether regular or irregular planting the spacing between each tree should be approx 1.5m

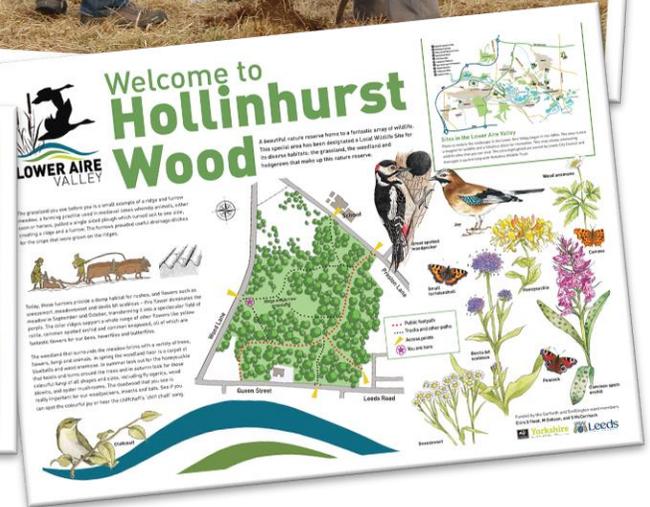
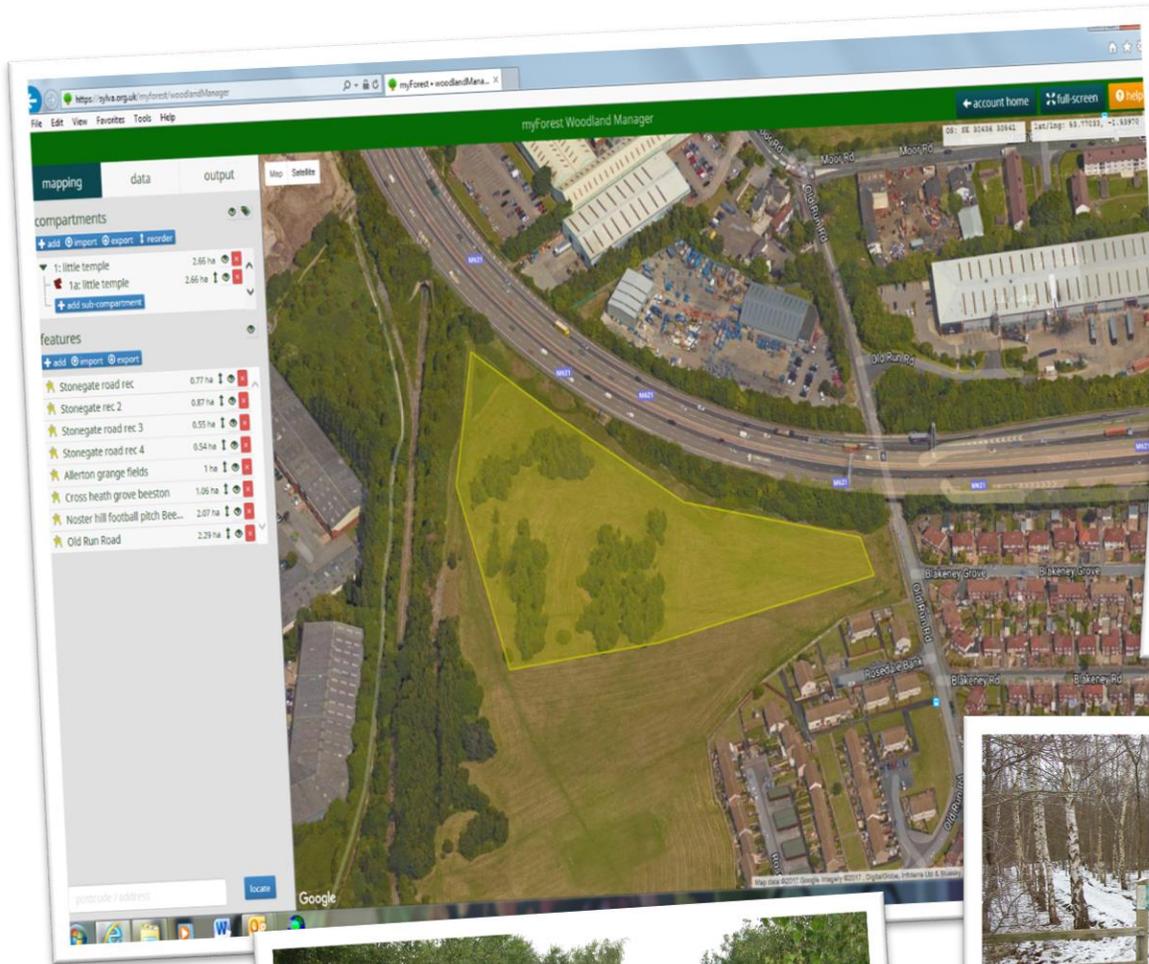


# Woodland planting scheme example



**Land preparation and thorough establishment management are essential. And must have a long-term view.**





It's not just a tree thing.



# Biodiversity net gain.



# 'Naturalised' flood management – making space for water.



# Green streets incorporating GBI into highway design.



# White Rose Forest.

- The White Rose Forest Strategy for Leeds was launched in December 2020
- It sets the ambition to almost double tree canopy cover by 2050.
- White Rose Forest Action Plan 2021-25 launched in 2021. It covers West & North Yorkshire.

