



Implementing a Carbon-based Urban Tree Planting Strategy — but not forgetting everything else!

**Glenn Gorner MICFor
Leeds City Council**

Tree planting targets : Challenges

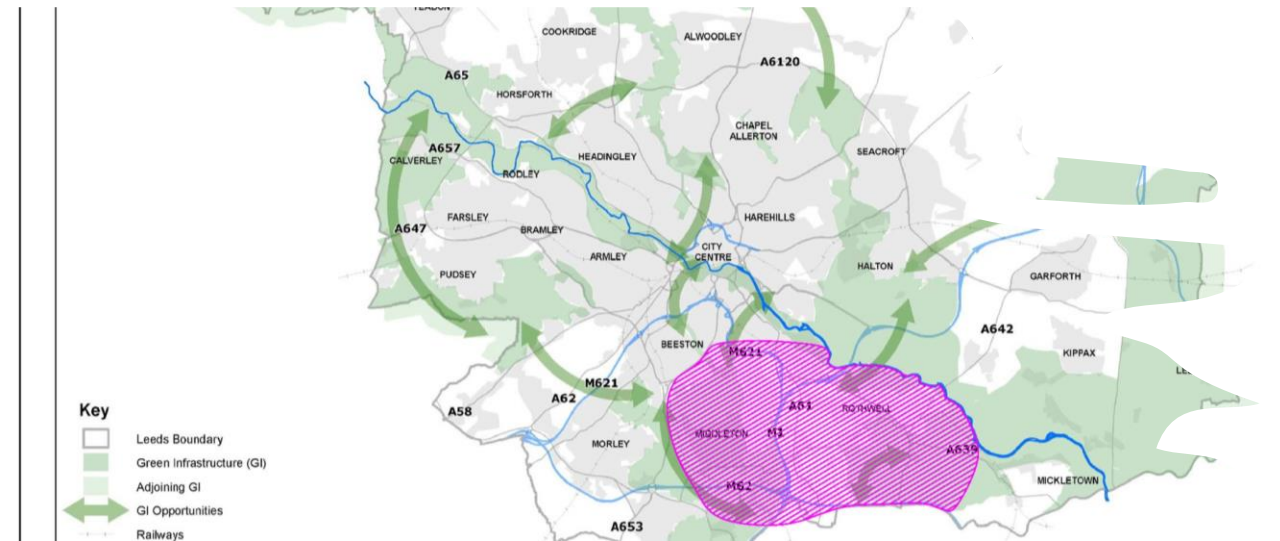
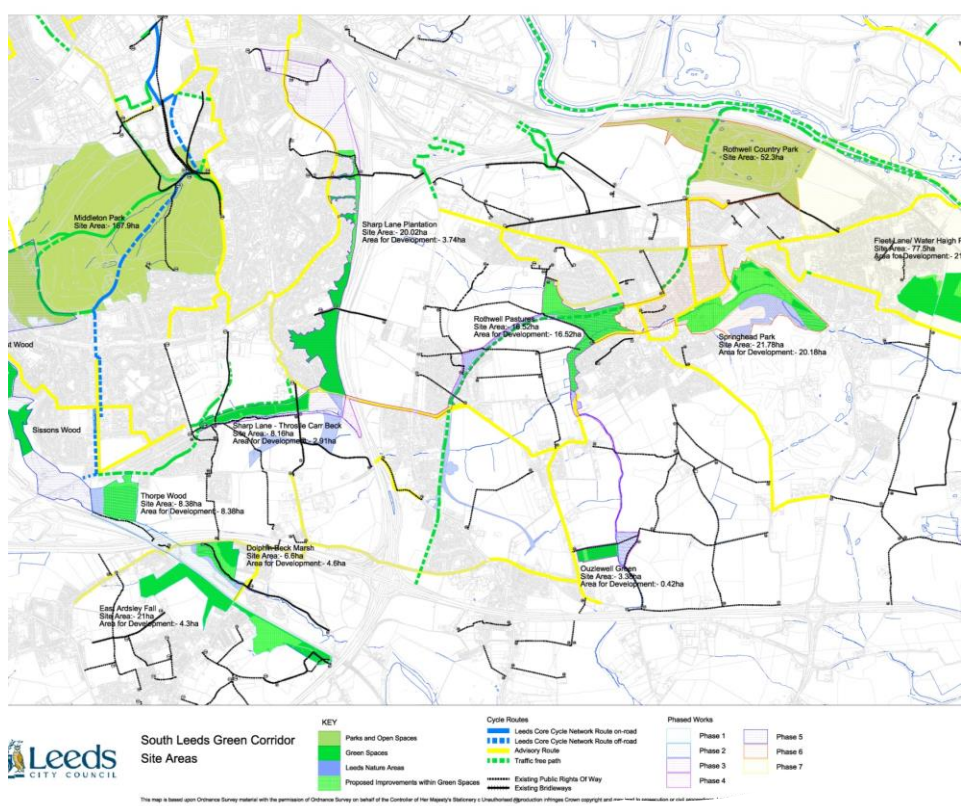
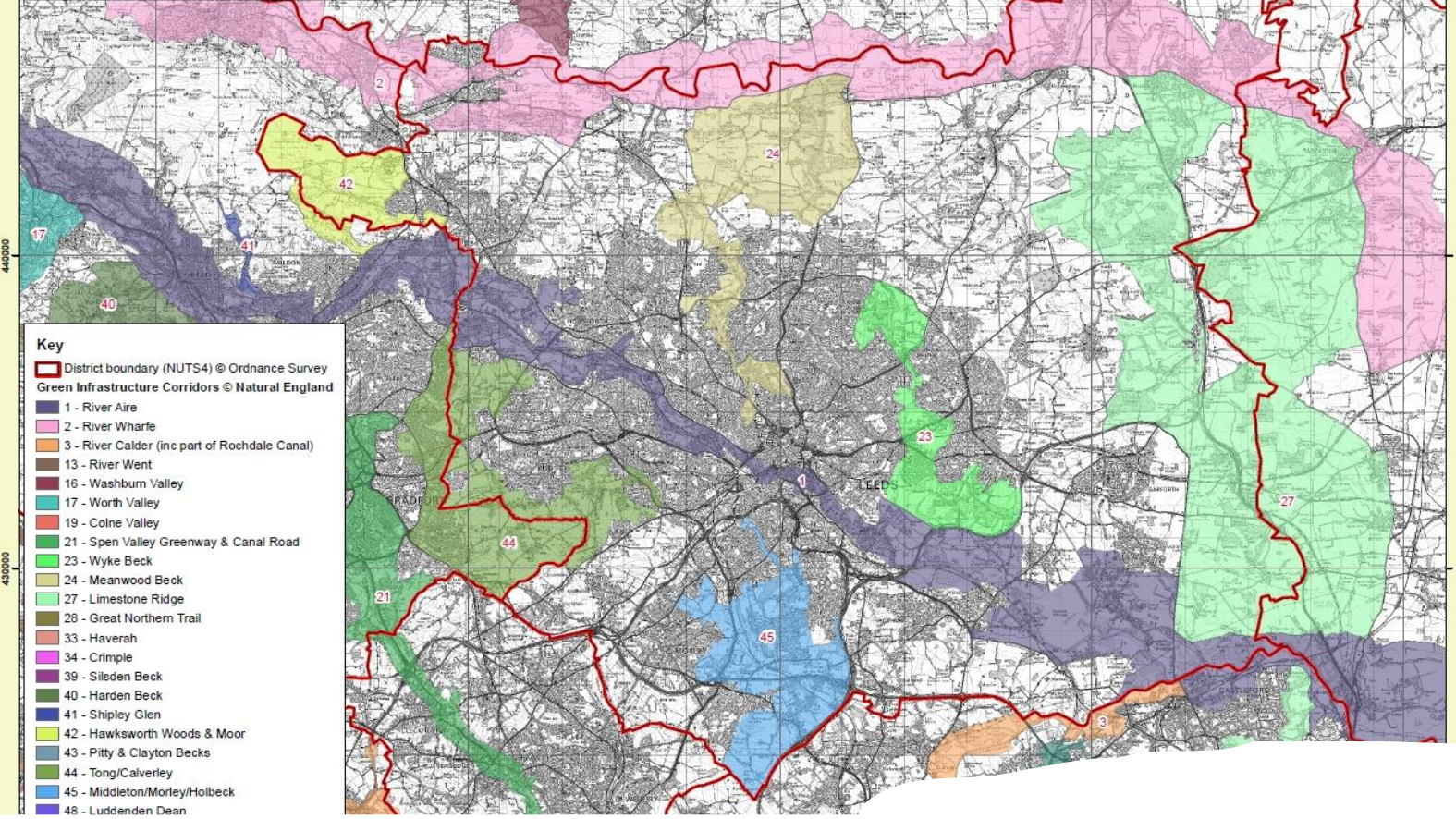
- Mix of accessible urban trees and woodlands with increased rural planting. Includes the more challenging urban sites.
- Policy needs to catch up – “clear, stable and well-designed policies” (CCC, 2019)
- Identify the challenges and blocks to tree planting such e.g. Post Common Agricultural Policy and the transition to Environmental Land Management Scheme.
- Ambition for 2021-25 – 30,000 ha then 30,000 ha/yr to 2050 – 1/3 in England.
- NB 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.





Significant increases in both rural and urban tree planting





STRATEGIC GREEN INFRASTRUCTURE



CONNECTING LANDSCAPES



**18th Century
'Capability'
Brown**



**1970's Post
- industrial**



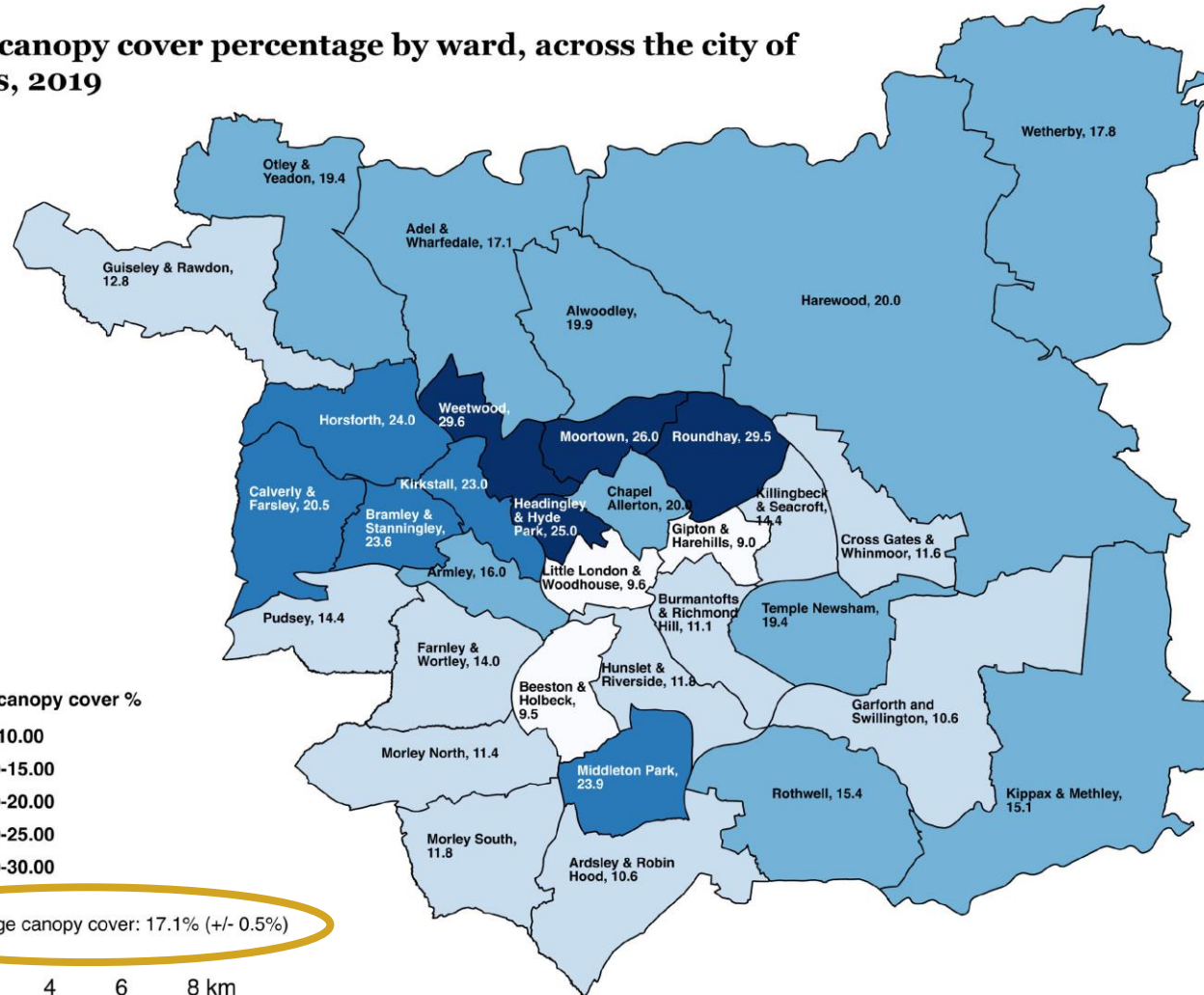
**2000 Post
Industrial**

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%

Legend

Ward tree canopy cover %

- 0.00-10.00
- 10.00-15.00
- 15.00-20.00
- 20.00-25.00
- 25.00-30.00

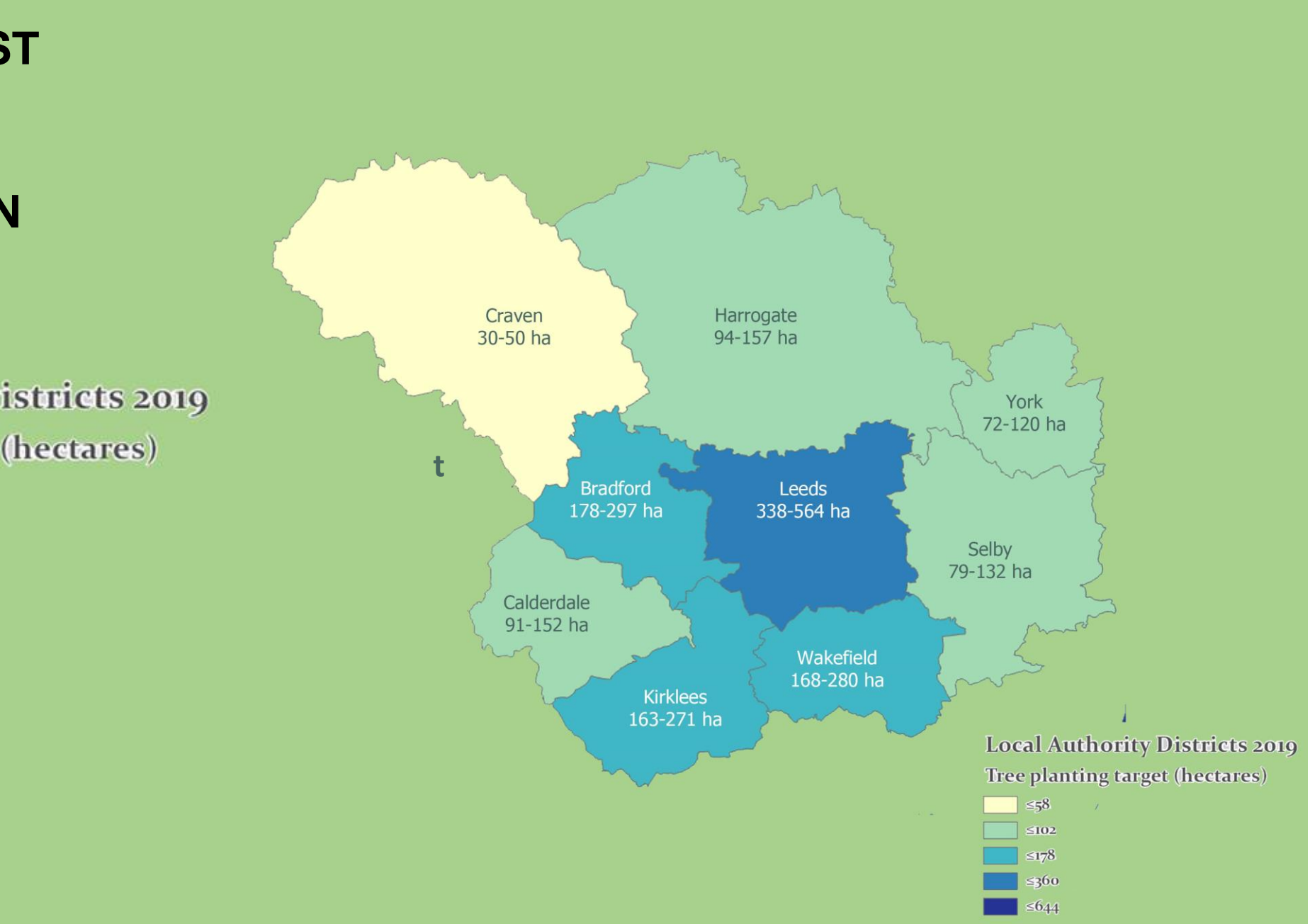
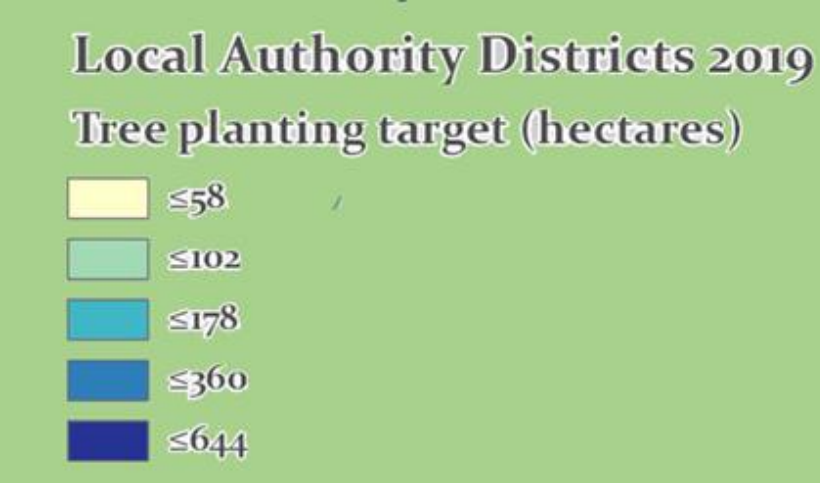
Ward average canopy cover: 17.1% (+/- 0.5%)



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

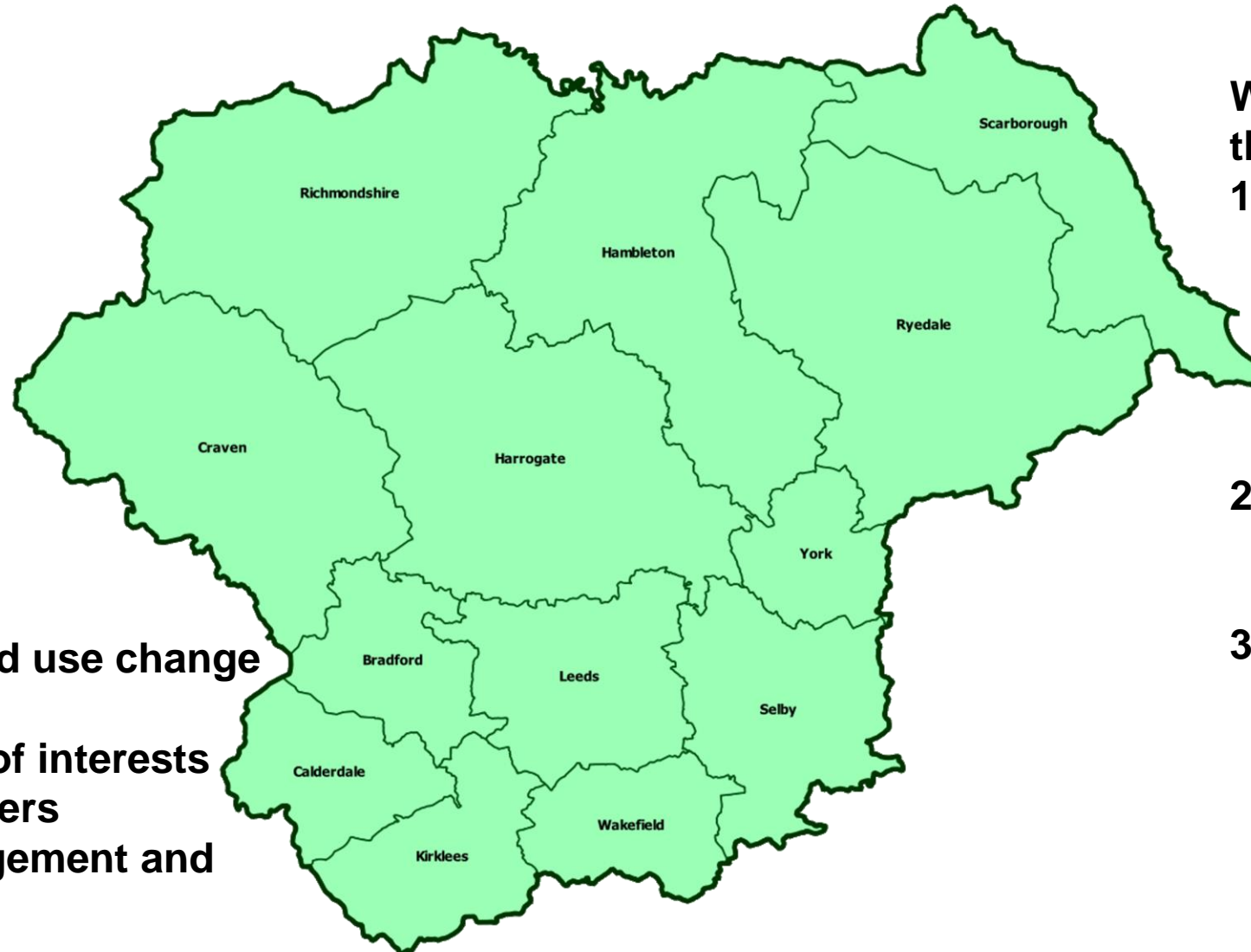
Figure 1. Map to show the estimated percentage tree canopy cover of Leeds wards. Canopy cover estimates calculated using surveys of 800 sample points per ward in i-Tree Canopy v6.1. Map produced using QGIS v2.18. Ward boundary shape-files provided by Leeds City Council.

WHITE ROSE FOREST DISTRICTS TREE PLANTING TARGETS BASED ON EMISSIONS



These figures are a theoretical responsibility and planting outside of the local authority area but within the UK maybe required.

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.**

www.whiteroseforest.org
whiteroseforest@kirklees.gov.uk



Planting for Our Future

White Rose Forest Action Plan
2021-2025



**White Rose Forest
Action Plan 2021-25**

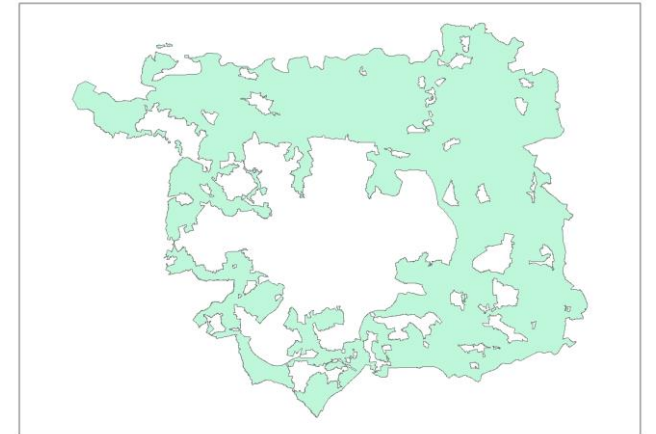
**Covers the whole of
West and North
Yorkshire**

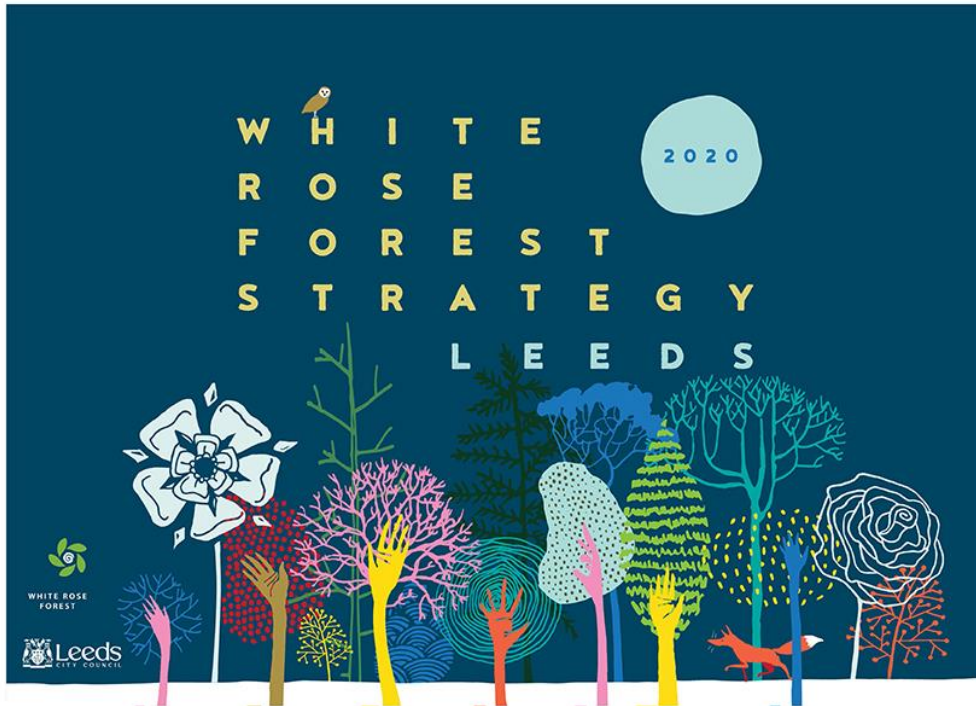
**launched on
17th November
2021**

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





Sets the ambition to almost double tree canopy cover by 2050

White Rose Forest Strategy for Leeds

Ambition to plant more trees in Leeds working with partners. To increase woodland and tree cover from 17% to 33% by 2050

Strategy defines:

- Where we're going to plant,
- What resources we have and need,
- Why we're doing it,
- What we need to consider when designing woodlands
- Who's going to pay for it,
- How and Who are we going to tell,
- What we do Next

LCC is sowing and grow its 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**

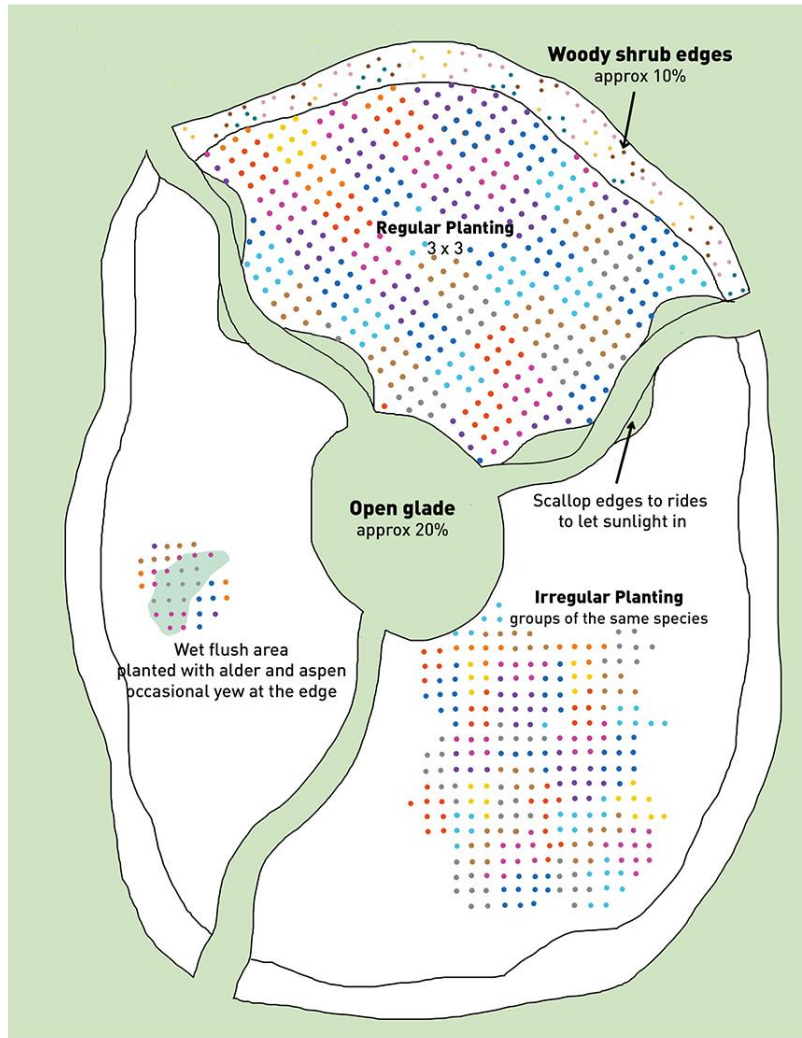
- **3 BASIC WOODLAND PLANTING MIXTURES HAVE BEEN IDENTIFIED:**

- **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 scheme example



Woodland planting guidelines

Canopy species W10 community

- | | |
|--|--|
| ● Quercus robur
English oak | ● Tilia cordata
Lime |
| ● Betula pendular
Silver birch | ● Castanea sativa
Sweet chestnut |
| ● Acer pseudoplatanus
Sycamore | ● Prunus avium
Wild cherry |
| ● Alnus glutinosa
Alder | ● Populus tremula
Aspen |
| ● Taxus baccata
Yew | |

Woody shrubs

- | |
|---|
| ● Malus sylvestris
Crab apple |
| ● Ilex aquifolium
Holly |
| ● Corylus avellana
Hazel |
| ● Crataegus monogyna
Hawthorn |

Block planting

each dot represents 1 tree

Regular planting e.g. 3 x 3

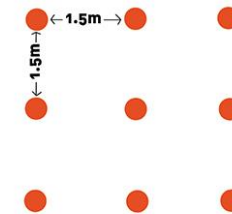


Irregular planting in groups of the same species



Spacing

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





**LAND
PREPARATION
AND THOROUGH
ESTABLISHMENT
MANAGEMENT
ARE ESSENTIAL**

**BUT A
LONG-TERM
VISION IS
ESSENTIAL**

Welcome to Hollinhurst Wood

A beautiful nature reserve home to a fantastic array of wildlife. This special area has been designated a Local Wildlife Site for its diverse habitats: the grassland, the woodland and hedgerows that make up this nature reserve.

small example of a ridge and furrow medieval times whereby animals, either plough which turned soil to one side, rows provided useful drainage ditches ridges.

habitat for rushes, and flowers such as bit scabious - this flower dominates the transforming it into a spectacular field of sole range of other flowers like yellow common knapweed, all of which are bees and butterflies.

wood brims with a variety of trees, the woodland floor is a carpet of flowers to look out for the honeysuckle and in autumn look for those including fly agarics, wood and wood that you see is insects and bats. See if you can hear the chiffchaff's 'chiff chaff' song.

chaff

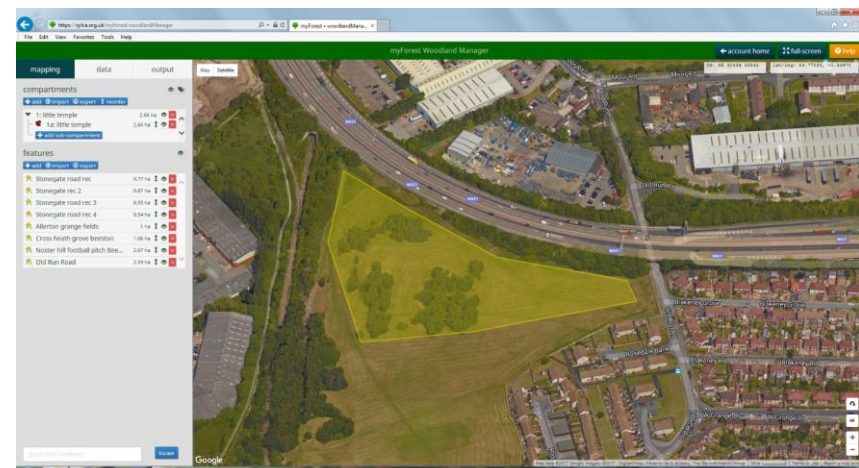
- Hollinhurst County Park
- Hollinhurst Woodland Park
- Hollinhurst Wood
- Hollinhurst Wood
- Hollinhurst Wood
- Hollinhurst Wood
- Hollinhurst Wood
- Hollinhurst Wood
- Hollinhurst Wood
- Hollinhurst Wood

Sites in the Local Wildlife Site
Plans to restore the land a magnet for wildlife an wildlife sites that you can managed in partnership

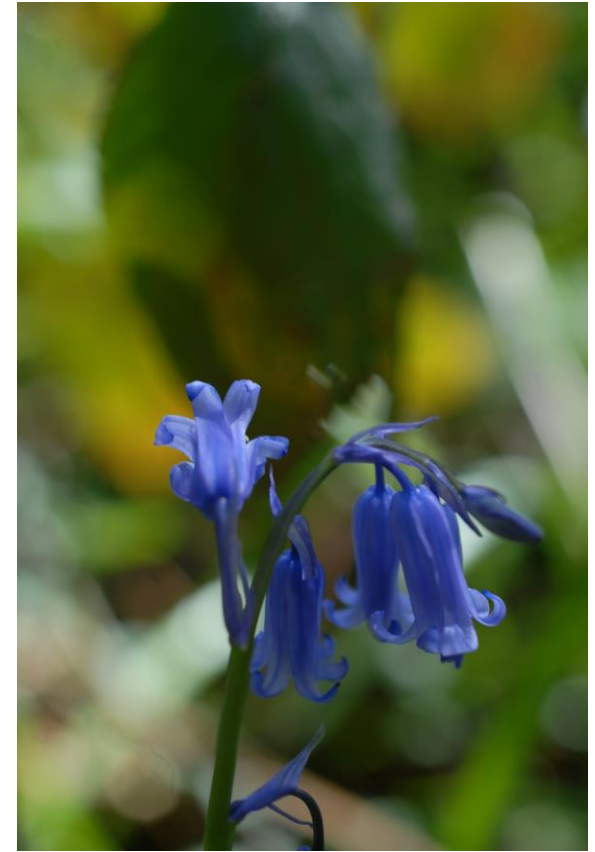


IT'S NOT JUST A TREE THING!

1,000 volunteers helped plant trees during 2022/23 planting season







BIODIVERSITY NET GAIN



‘NATURALISED’ FLOOD MANAGEMENT – MAKING SPACE FOR WATER

Wyke Beck Valley Newsletter



The Wyke Beck Valley programme aims to provide enhanced flood risk management in East Leeds and at the same time provide enriched green spaces for the communities along the valley

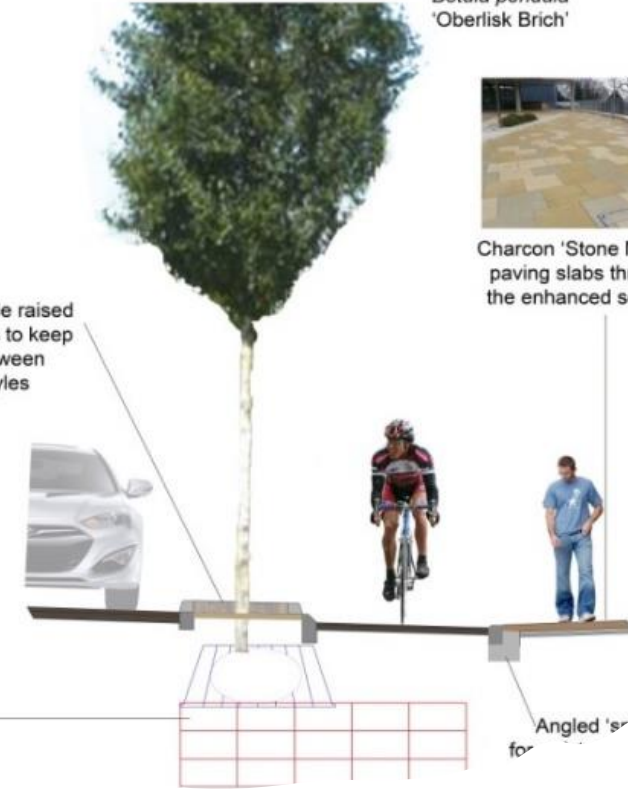




Minimum
610mm - 1200mm wide raised
buffer zone with trees to keep
the separation between
vehicles and bicycles



Underground soil structure
system to prevent ground
compaction & ensure
optimum Soil volume for
growth



Betula pendula
'Oberlisk Brich'



Charcon 'Stone Mast'
paving slabs through
the enhanced section

Angled 's'
for



GREEN STREETS – INCORPORATING GBI INTO HIGHWAY DESIGN

East Leeds Orbital Route (ELOR)

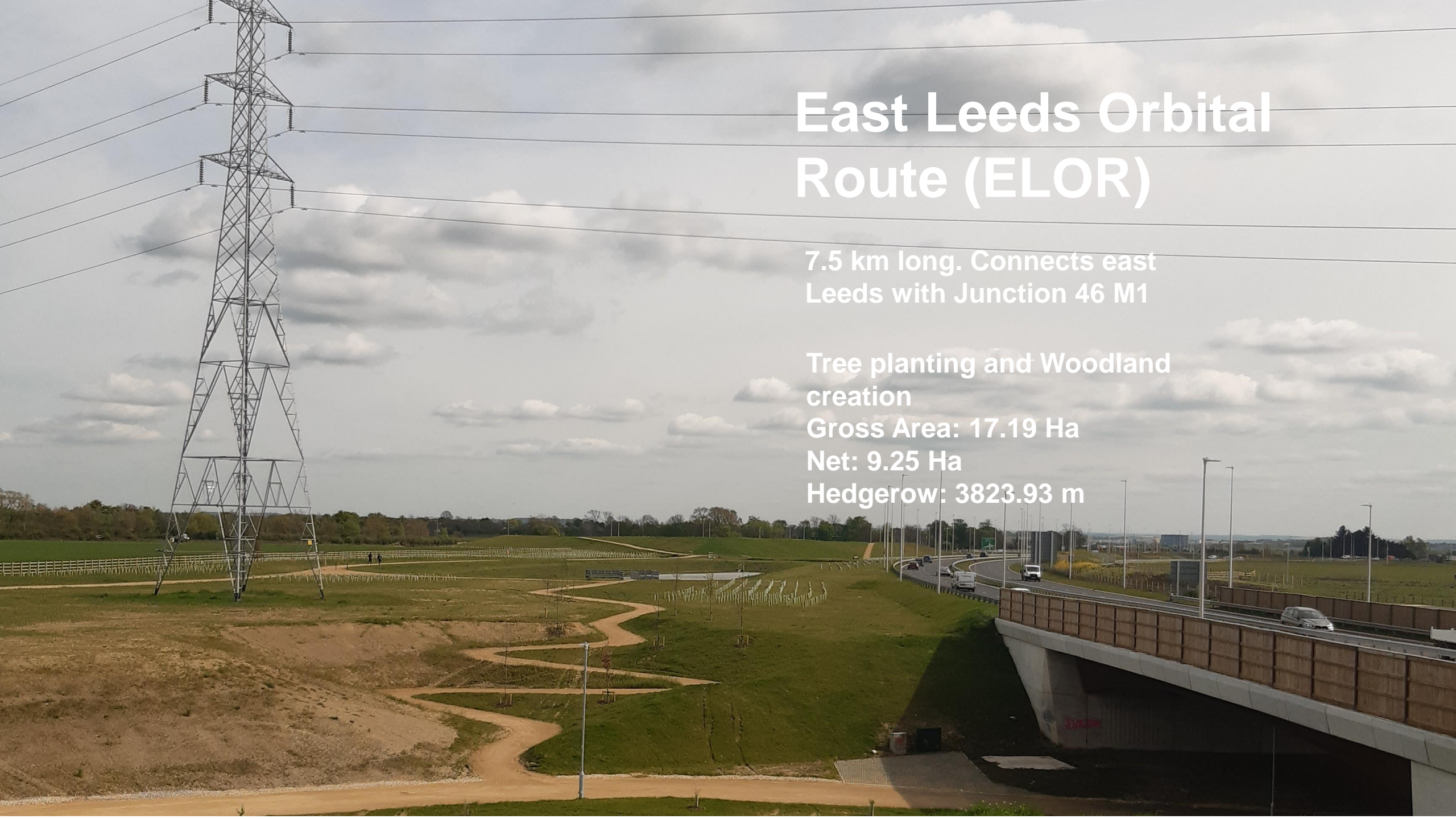
7.5 km long. Connects east
Leeds with Junction 46 M1

Tree planting and Woodland
creation

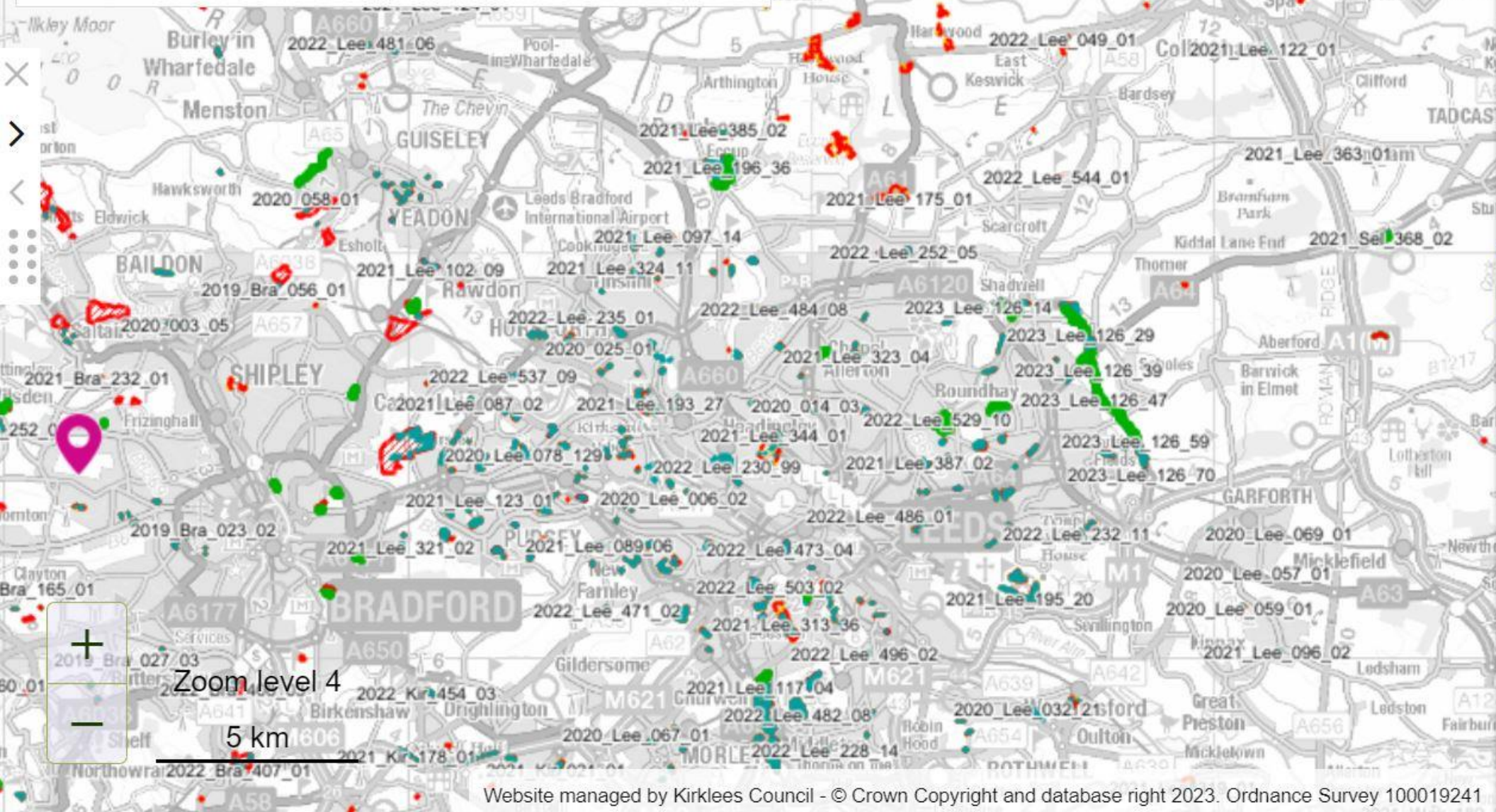
Gross Area: 17.19 Ha

Net: 9.25 Ha

Hedgerow: 3823.93 m



Postal code, Name or Address




Map project

WRF -


Base maps


Yorkshi

Map layers

 Delivery Pathway

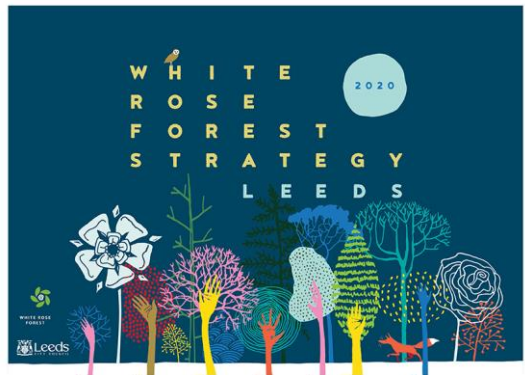
 Hedgerow Plantin

 Net Area Planting

 Delivery Pathway

 DP Site Status

The White Rose Forest Strategy for Leeds was launched in December 2020



It sets the ambition to almost double tree canopy cover by 2050

A graphic titled 'Strategy defines:' on a dark blue background. It features a target icon with a white arrow in the center, a red wheelbarrow filled with brown soil, and a green sapling with a white tag. A blue shovel is on the left. At the bottom right, there are small colorful tree icons. The text 'Ambition to plant more trees in Leeds working with partners. To increase woodland and tree cover from 17% to 33% by 2050' is on the left. The 'Strategy defines:' list is on the right.

Ambition to plant more trees in Leeds working with partners. To increase woodland and tree cover from 17% to 33% by 2050

Strategy defines:

- Where we're going to plant,
- What resources we have and need,
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- Who's going to pay for it,
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Leeds has created 148 ha of new tree canopy cover over the last 3 years.

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