

Report of the Chief Operating Officer

York's Tree Canopy Expansion Target

Recommendation

1. Promote an ambition for a 13% target for tree canopy cover by 2050, equating to around 22-27 ha per annum. This target would result in an annual carbon sequestration rate at 2050 of circa 9,000tCO₂ per year; equivalent to around 1% of the regions total CO₂ emissions between 2020-2050.
2. This target is considered achievable when balanced against the capacity for tree planting within the unique landscape and setting of York.

Overview and background

3. City of York Council is a member of the White Rose Forest (WRF) partnership, a local authority joint venture hosted by Kirklees Council, which acts as the partnership's accountable body.
4. WRF is the community forest for North and West Yorkshire, one of four community forests in the north of England working together to create the larger Northern Forest that will stretch from Merseyside across Manchester and Yorkshire.
5. WRF are planting millions of trees in urban centres and countryside that will help manage flood risk, combat climate change, create jobs and provide happier and healthier places.



6. The WRF reports to a Director of Development (DoD) group comprising directors of development across each constituent local authority. In Nov 2019, DoDs gave the WRF Carbon Group responsibility to identify a methodology to calculate the region’s tree canopy expansion target by 2050. Targets emerging from the methodology will form the basis of a carbon-led tree planting strategy for the WRF area known as the WRF Plan.
7. WRF commissioned a group of regional and national experts to assess the potential level of carbon sequestration that could be achieved through tree planting across the WRF area¹. Phase 1 of this study was completed in September 2020. The study set out to:
 - help local authorities understand the potential for carbon sequestration through woodland creation and to estimate the carbon contribution of existing trees outside of woodland and;
 - provide local authorities with evidence to help set carbon-led ambitions for 2050 tree canopy expansion.
8. On 14 December 2020 the study findings were presented to the districts to initiate individual district discussions on tree canopy ambitions for ‘Phase 2’.
9. WRF set a deadline for districts to conclude these ‘Phase 2’ discussions and make recommendations regarding their district level tree canopy expansion target for respective DoD sign off by the end of January 2021. CYC have reached an agreement with WRF that we provide a suggested target for York in March 2021, for sign-off by the WRF Steering Group.
10. The WRF area target is due to be presented to the Yorkshire Regional Leaders’ Group in spring 2021 with the WRF Plan being officially published on 1 August 2021 (Yorkshire Day).

¹ Led by United Bank of Carbon and University of Leeds

Current Tree Canopy Cover & Regional Targets

11. Annex 1 details current district level tree canopy cover (ha/%). This shows:
- That average tree canopy cover across the 9 districts is 11.96% against a national average of 13% (Across the expanded WRF area of all 13 districts the average is 10.95%)
 - Leeds and Kirklees are the only two districts with current tree canopy cover in excess of the national average at 17.16% and 15.17% respectively
 - Craven and Selby are well below this average at 5.37% and 9.94% respectively
 - York's current tree canopy cover is 10.76%
12. York currently has 2,926 ha of tree canopy cover, representing 10.8% of its total area. 60% of this canopy cover is made up of trees outside woodlands.
13. The declared 2050 tree canopy targets from 7 of the 9 original WRF districts shows a collective ambition to increase tree canopy cover to an average of 19.14% by 2050

Developing an Evidence Based Tree Canopy Cover Target

14. Increasing York's tree cover from the current 10.76% of total area to 13% (national average) by 2050 would require 608 ha of new cover, or 21 ha per year.

Tree cover in 2050 (%)	New Canopy Cover (ha)	Annual increase (ha/yr)
13	608	21
15	1,150	39
20	2,506	86

15. Achieving 21 ha of tree planting every year in York would result in the annual removal of 1-2% of the estimated regional residual emissions in 2038, rising to 8-15% of residual emissions in 2050.
16. WRF has provided each district with data showing areas for potential low risk woodland creation. This data shows York to have over 8,000 hectares of assessed low risk woodland (LRW) land (low risk in terms of political and ecological constraints).

Area	Total Low Risk Area for Woodland Creation	
	Hectares	% of Total Area
York	8,245	30

17. Officers have combined this dataset with available information relating to heritage and land designation to identify existing and potential constraints and considerations to tree planting and canopy creation (Annex 3).
18. Following this process, it is estimated that a maximum of 6,500 ha of land identified by WRF has potential for tree planting. While further work is required to understand impacts on key views and desirable openness of land, further limiting the available planting area, the implication is that York could accommodate greater tree canopy cover.
19. The rate of viable delivery imposes a significant constraint on new canopy cover. The York Community Woodland project in West York aims to deliver 50-60 ha of new tree cover over the next two years. A 13% target for 2050 would require a similar level of growth every two years.

Recommended Target

20. The current rate of woodland creation and available area indicates that a target of 13% tree canopy coverage in York by 2050 should be possible and would bring York in line with the national average. This would require 608 ha of new canopy cover in the city at an average increase of 21 ha/yr.

Contact Details

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Report approved: ✓ **Date:** 26.2.21

Wards Affected:

All

For further information please contact the author of the report

Annexes:

Annex 1: WRF District level tree canopy ambitions to 2050

Annex 2: Informing a carbon-led tree planting strategy for the White
Rose Forest

Annex 3: Mapping of WRF Outcomes with Local Constraints

Abbreviations:

CYC – City of York Council

DoD - Director of Development

LRW - Low Risk Woodland

WRF - White Rose Forest