

Tree & Hedgerow Strategy – Action Plan (draft)

Introduction

Trees and hedgerows play a central role in our strategic response to the challenges of biodiversity loss and climate change. The changing climate and increased risk of extreme weather events such as flooding, highlights the importance of our green infrastructure in protecting our communities and the resilience of this infrastructure underpins our ability to adapt to climate change.

The purpose of the Tree and Hedgerow Strategic Action Plan is to set out a medium-term plan for managing, protecting, and enhancing tree and hedgerow cover in South and East Lincolnshire, in line with the Tree and Hedgerow Strategy. It is a key step towards reaching our net zero targets, as well as supporting nature recovery and opportunities for community participation.

A tailored action plan for tree and hedgerow planting and management is vital for South and East Lincolnshire due to its distinctive landscape character.

National Policy framework

The Environment Act 2021 places the environment at the centre of policy making and takes urgent and meaningful action to address the nature and climate crisis. It sets out an ambitious framework to ensure that future generations inherit a healthier environment and mandates the creation of Local Nature Recovery Strategies (LNRS) to drive nature recovery and environmental benefits. The Local Nature Recovery Strategy for Lincolnshire, currently in development by Lincolnshire County Council, must be embedded in the Local Plan and underpin any activities which impact the natural environment, prioritising trees and woodland.

The England Trees Action Plan sets out the Government's long-term vision for the whole treescape in England by 2050. The plan provides a strategic framework for implementing the Nature for Climate Fund and outlines the policy actions the Government is taking to help deliver the vision.

Baseline data for South and East Lincolnshire

South and East Lincolnshire has not historically been a heavily tree covered area due to its predominantly fenland and agricultural landscape. A initial baseline mapping exercise has been undertaken using I-tree canopy software which showed that approximately 6.5% of land in South and East Lincolnshire is classified as tree cover, and just 1.5% is classified as hedgerows.

Hedgerows in particular could be champions of nature recovery however they are often poorly managed and have been in steady decline during the last century with damage, neglect, and removal remaining as significant threats.

As well as providing a haven for wildlife, hedgerows and trees provide natural capital benefits and wider ecosystem services. CPRE estimate that for every £1 invested in hedgerows, as much as £3.92 is generated in the wider economy due to key environmental and economic benefits provided.¹

In South and East Lincolnshire over 80 kilotonnes of carbon is sequestered annually in trees with an estimated value of over £18,000,000.

Trees help to protect water systems and improve the quality of soils which is particularly valuable in agricultural areas. During period of heavy rain, pollutants run off and can leach into water systems.

¹ CPRE/Organic Research Society. *Hedge fund: investing in hedgerows for climate, nature and the economy*. September 2021

Tree cover can help to intercept rain and reduce flood risk whilst their roots help to prevent soil erosion.

The tables below indicate the estimated financial value of trees on hydrological and atmospheric conditions in South and East Lincolnshire:

Tree Benefit Estimates: Air Pollution (English units)

Abbr.	Description	Amount (oz)	±SE	Value (GBP)	±SE
CO	Carbon Monoxide removed annually	0.56	±0.03	£0	±0
NO2	Nitrogen Dioxide removed annually	11,579,889.80	±720,223.28	£53,438	±3,324
O3	Ozone removed annually	38,773,597.62	±2,411,564.21	£1,024,477	±63,718
SO2	Sulfur Dioxide removed annually	1,562,450.93	±97,178.26	£2,663	±166
PM2.5	Particulate Matter less than 2.5 microns removed annually	5,408,120.90	±336,363.70	£4,674,024	±290,706
PM10*	Particulate Matter greater than 2.5 microns and less than 10 microns removed annually	7,118,317.71	±442,731.17	£6,779,311	±421,646
Total		64,442,377.52	±4,008,060.66	£12,533,913	±779,560

Currency is in GBP and rounded. Standard errors of removal and benefit amounts are based on standard errors of sampled and classified points. Air Pollution Estimates are based on these values in oz/mi²/yr @ £/oz/yr and rounded: CO 0.006 @ £0.03 | NO2 124,381.828 @ £0.00 | O3 416,474.684 @ £0.03 | SO2 16,782.587 @ £0.00 | PM2.5 58,089.669 @ £0.86 | PM10* 76,459.222 @ £0.95 (English units: oz = ounces, mi² = square miles)

Tree Benefit Estimates: Hydrological (English units)

Abbr.	Benefit	Amount (Mgal)	±SE	Value (GBP)	±SE
AVRO	Avoided Runoff	1,577.90	±98.14	£9,257,557	±575,783
E	Evaporation	8,903.36	±553.75	N/A	N/A
I	Interception	8,949.11	±556.60	N/A	N/A
T	Transpiration	25,597.42	±1,592.06	N/A	N/A
PE	Potential Evaporation	22,349.93	±1,390.08	N/A	N/A
PET	Potential Evapotranspiration	17,375.19	±1,080.67	N/A	N/A

Currency is in GBP and rounded. Standard errors of removal and benefit amounts are based on standard errors of sampled and classified points. Hydrological Estimates are based on these values in Mgal/mi²/yr @ £/Mgal/yr and rounded: AVRO 16.949 @ £5,867.00 | E 95.633 @ N/A | I 96.124 @ N/A | T 274.947 @ N/A | PE 240.065 @ N/A | PET 186.630 @ N/A (English units: Mgal = millions of gallons, mi² = square miles)

Friends of the Earth have undertaken woodland opportunity mapping for South and East Lincolnshire and have determined:

- There is existing tree canopy cover of 5.4% in East Lindsey with a potential for woodland creation opportunities of up to 908ha, of which 369ha could be achieved through rewilding.
- There is existing tree canopy cover of 2.3% in Boston, and there is a potential for woodland creation opportunities of up to 11ha.
- South Holland has the lowest tree cover in the country with just 2.2%, and there is considered less than 1ha with potential for woodland creation opportunities in this district due to the existing fenland landscape character.

The average tree cover in England is 12.8%, and whilst this level of cover is unlikely to be appropriate in our region, due to its geography and landscape character, it is clear that increased tree and hedgerow cover would offer a multitude of benefits for the wellbeing of people and the environment. It should therefore be made a high priority, whilst adhering to the principle of 'right tree in the right place' ensuring, for example, that valuable grassland habitats are not lost and landscape character is protected.

Tree planting targets

The UK government has set a national target of creating or restoring 30,000 miles of hedgerows by 2037 and 45,000 miles by 2050, as part of its Environmental Improvement Plan 2023.

Setting a target at this point in time for South and East Lincolnshire would be somewhat arbitrary and further detail is required to ensure that any such target is both informed and achievable.

Additional work to enable this is therefore captured as part of the Action Plan to ensure that tree and hedgerow targets are soon established.

Local Provenance and Biosecurity

Biosecurity encompasses all procedures and measures which seek to prevent the introduction and spread of pathogens. There has been a significant increase in the number of non-native tree pests and diseases being introduced to the UK since the early 2000s. The implementation of appropriate biosecurity measures such as cleaning tools and equipment between sites, can significantly reduce the risk of introducing these pathogens, and a commitment to sourcing native tree stock from the UK and Ireland (UKISG) is vital to ensure resilience to pests and diseases, which can be introduced through imports.

Some of the most prevalent pest and diseases affecting trees in the UK are Ash Dieback, Dutch Elm Disease, Horse Chestnut Bleeding Canker and Leaf Miner, as well as several Phytophthora species.

As a recommended means to improve biosecurity and to assist with the provision of native trees with local provenance, schemes to establish community tree nurseries could be supported. Having access to a reliable supply of native trees can reduce procurement costs for tree planting schemes, as well as providing numerous environmental, social, economic and health benefits for local communities.

Consideration must also be given to future climatic conditions and a diversity of tree species should be sourced to ensure resilience, especially as climate change increases susceptibility to biosecurity risks.

Action Plan

The delivery timeframe for actions has been broken down into Small, Medium and Long Term targets. This recognises that many of the activities will develop over a period of time and for many, will be ongoing tasks.

Indicative timeframes:

(S) Short: 0 to 2 years

(M) Medium: 2 to 5 years

(L) Long: 5 to 10 years

Action	Key activities	Delivery Timeframe	Lead Officer/Team
PROTECT			
Implement and promote robust biosecurity measures, to minimise the spread of pests and diseases.	Develop a portable biosecurity pack for staff responsible for tree maintenance.	S	Arboricultural Officer/Climate Change & Environment Team
	Identify reputable suppliers through our Procurement Strategy to ensure sourcing of replacement plants which are propagated and grown in the UK	S	Arboricultural Officer/Climate Change & Environment Team/Procurement Team
	Work with partners to consider whether community tree nurseries could be established and supported	L	Arboricultural Officer/Climate Change & Environment Team
Tree felling on Council-owned land only takes place where there is clear and valid justification to do so	Ensure the reasons for any tree felling work are clearly documented and recorded.	L	Arboricultural Officer/Neighbourhoods Team
	Ensure that all tree works are carried out to at least British Standard 3998 2010	L	Arboricultural Officer/Neighbourhoods Team

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Ensure that existing tree and hedgerow habitat is documented and maintenance of such is adequately resourced	Develop and implement long-term management plans for Council-owned green open spaces.	M	Arboricultural Officer/Neighbourhoods Team/Climate Change and Environment Team
Retain ancient woodland and ancient or veteran trees.	Ensure development proposals resulting in the loss or deterioration of irreplaceable habitats are refused, unless there are wholly exceptional reasons and a suitable compensation strategy in place.	L	Arboricultural Officer/Principal Ecologist
Establish operational and maintenance parameters around managing trees within council estate.	Develop a Partnership Tree Management Policy in relation to management of trees on council-owned land	S	Street Scene/Arboricultural Officer
Continue work to assess canopy cover and improve data that quantifies the existing resource, its distribution and valuation across the sub-region, as available.	Improve availability of baseline data, better understand our current resource, and assist with identification of sites suitable for tree planting.	S	Climate Change & Environment Officer
PLANT			
Ensure that land management is planned and resourced to enable trees and hedgerows to thrive into future generations.	Develop and implement long-term management plans at the outset of new Council-led planting schemes including plans for water provision and general maintenance.	M	Climate Change & Environment Team/ Arboricultural Officer/Principal Ecologist
	Ensure that Biodiversity Net Gain plans are in place for new developments and that long-term management plans cover new planting on development sites not covered by BNG.	M	Arboricultural Officer/Principal Ecologist
Implement the principles of Biodiversity Net Gain to provide opportunities for new tree and hedgerow planting	Ensure new development proposals provide detailed landscaping plans with supporting long-term landscape management plans.	M	Climate Change & Environment Team/Arboricultural Officer
		S	Arboricultural Officer/Principal Ecologist

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	Ensure specialist officers are consulted on development proposals where opportunities for new landscaping exist.		
To report annually on tree and hedgerow management and planting by the Council and key stakeholders across the sub-region	<p>Establish a database of tree planting within the Partnership to enable progress monitoring and reporting of both maintenance work and new planting.</p> <p>To record gains achieved through Biodiversity Net Gain and wider development opportunities</p>	<p>S</p> <p>M</p>	<p>Climate Change & Environment Team/ Arboricultural Officer</p> <p>Arboricultural Officer/Principal Ecologist</p>
Ensure that new tree and hedgerow planting adheres to biosecurity policies and procedures.	To work with procurement to identify nurseries and suppliers that have strict no-import-for-resale policies, regular monitoring by outside agencies and rigorous inspections of tree and hedgerow stock to ensure health and quality.	S	Climate Change & Environment Officer/ Arboricultural Officer/Procurement Team
Identify opportunities to join up fragmented existing areas of woodland and ancient woodland.	Utilise Ancient Woodland Registers, the Local Nature Recovery Strategy and Biodiversity Opportunity Mapping to inform tree and hedgerow planting decisions.	M	Climate Change & Environment Team/Planning Team/ Arboricultural Officer/Principal Ecologist
To develop a better understanding of the potential for tree and hedgerow planting on Council-owned sites	Undertake an audit of landholdings to quantify tree and hedgerow planting opportunities.	S	Climate Change & Environment Team/Planning Team/ Arboricultural Officer/Principal Ecologist
To increase canopy cover across the sub-region as a whole, with a commitment to the principle of 'right tree in the right place'.	<p>Develop and implement strategies to secure additional funding for tree planting programs through successful grant funding bids.</p> <p>Implement a future tree planting target in the context of better data and a considered approach to increase tree cover.</p>	<p>L</p> <p>S</p>	<p>Climate Change & Environment Team/ Arboricultural Officer</p> <p>Climate Change & Environment Team/ Arboricultural Officer</p>

	Ensure development schemes identify tree planting opportunities.	M	Climate Change & Environment Team/Arboricultural Officer/Principal Ecologist
To increase hedgerow cover, providing valuable habitats and benefits to resilience.	Develop and implement strategies to secure additional funding for hedgerow planting programs through successful grant funding bids	L	Climate Change & Environment Team/Arboricultural Officer
	Implement a future hedgerow planting target in the context of better data and a considered approach to increasing hedgerow habitat.	S	Climate Change & Environment Team/Arboricultural Officer
	Ensure development schemes identify tree planting opportunities.	M	Climate Change & Environment Team/Arboricultural Officer/Principal Ecologist
PARTICIPATE			
Ensure that communities have the opportunity to take ownership of their natural environment and play an active role in the strategy.	Review and reinvigorate existing Tree Warden Network.	S	Climate Change & Environment Team/Arboricultural Officer
	Implement a quarterly newsletter for key stakeholders.	S	Climate Change & Environment Team/Arboricultural Officer
	Establish a Tree Forum to bring together stakeholders to support strategy delivery.	M	Climate Change & Environment Team/Arboricultural Officer
Develop past Community Orchard schemes to provide health and wellbeing benefits and education opportunities.	Arrange annual Apple Day community event at Westgate Fields flagship orchard	S	Climate Change & Environment Team
	Work with existing community orchards to provide ongoing training around pruning and maintenance.	S	Climate Change & Environment Team
	Continue to grow Community Orchard network through volunteer engagement	M	Climate Change & Environment Team

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	Secure future funding to enable further rollout of Community Orchards across the partnership area.	M	Climate Change & Environment Team/Arboricultural Officer
Build links with a range of external stakeholders understand existing planting outside of Council-owned assets, identify new planting opportunities and support partnership delivery of the strategy	Engage with local schools to understand the success of historic planting schemes and identify opportunities to expand new planting into the future.	S	Climate Change & Environment Team
	Engage with town and parish councils, local landowners, community and faith groups to understand scope for planting within local towns and villages support by local stewardship arrangements.	S	Climate Change & Environment Team
	Engage with conservation bodies and neighbouring local authorities to enable a joined-up approach to identifying planting opportunities and increased access to funding for new planting schemes	S	Climate Change & Environment Team
Investigate wider opportunities to increase rates of tree and hedgerow planting via carbon offsetting and carbon accounting schemes	Work with other local authorities and key stakeholders to explore a local Carbon Insetting scheme.	M	Climate Change & Environment Team
	Promote awareness with local landowners and businesses of initiatives such as the Woodland Carbon Code.	M	Climate Change & Environment Team
Ensure transparency for local communities on Council decision-making relating to planned tree works	Publish detailed information about planned tree works on Council-owned land.	M	ICT/Arboricultural Officer
	Ensure open public access to documents relating to tree and hedgerow applications.	M	ICT/Arboricultural Officer