



Green Investment Plan, Cumbria

# West Cumbria Coastal Community Forest Scenario

## Summary of key points

- Proposals have been developed for a Coastal Community Forest in West Cumbria.
- This would better manage existing woodlands, and create new woodlands, with the aim of providing multiple benefits to communities in West Cumbria.
- Additional funding is needed to raise the investment required to deliver the Community Forest's Objectives.

The plans for West Cumbria Community Forest involve:

- An Expression of Interest has been through the first stage of assessment with the Community Forest Trust, and if that is successful it will go through further assessment with Defra, for funding under the Nature for Climate Fund. This would only fund the first few years/ 100's of hectares of woodland creation.
- Further funding sources need to be identified to generate the investment required to create the target of 7,000 + hectares of new woodland.
- The majority of new woodland creation would be in urban or peri-urban locations, to maximise community benefits.

Investment sources and returns:

- Government (Defra) funding covers 50% of revenue costs, helping support local employment.
- Other public funding options include:
  - ELMS, for example through support for the Local Nature Recovery Strategy.
  - Reduced medical costs to local health authorities, as a result of health and wellbeing benefits.
- Further private investment is needed, but as the majority are likely to be on private land, the woodlands can generate financial returns through:
  - Carbon credits, which will remain with the landowner.
  - Flood risk management and water quality benefits.
  - Generating biodiversity units required by developers to deliver biodiversity net gain.

The West Cumbrian Coastal Community Forest can generate substantial value to potential funders, but to make this investible activity needs to be coordinated into a single finance mechanism:

- An entity is needed to enable investment transactions and manage risk, it should:
  - Involve communities, through a role in the ownership and governance of the Forest, and through processes to prioritise locations and types of woodland.
  - Receive investments; fund, monitor and verify woodland creation; and return environmental credits and/or funds to investors, and benefits to local communities.
- A mechanism is needed to identify land for woodland creation in a cost-effective way, such as a reverse auction (which was used to attract land to create the National Forest in Leicestershire).

## Background Information

### 1.1 Baseline & Aims

We assume that the new woodlands would be created mainly on existing lowland / grassland areas of West Cumbria. Only habitats and land uses on which woodland creation is feasible are considered, so existing woodland, wetlands, intertidal, built up and designated habitats are excluded. The baseline reflects the current value of benefits from the feasible areas, assuming the woodland creation takes place on a range of land uses in proportion to their extent in West Cumbria.

The benefits of a West Cumbria Coastal Community Forest are assessed relative to this baseline. The Community Forest aims to deliver many of the objectives in the Government's 25 Year Environment Plan, creating resilient places for communities and nature to thrive through:

- Connection of urban populations with nature and forests, for leisure and recreation.
- Helping communities to adapt to climate change via the forest's potential for flood resilience and management.
- Biodiversity enhancement and community participation in nature-based place-shaping.

### 1.2 Community Forest Scenario

In order to assess the additional benefits of the Community Forest, it is assumed that:

- 7,000 ha of woodland are created over the next 25 years: 500 ha in the first 5 years, and 1,300 ha every 5 years thereafter.
- The majority of the woodland is created on areas relatively close to existing communities, in order to provide health and wellbeing benefits.

An important assumption relates to recreational activity, which increases due to both:

- The new woodlands having more accessibility, and therefore double the level of recreational use, than the farmland they are created on; and
- Woodlands being more attractive than farmland for recreation, resulting in additional visits.

The estimated additional natural capital values of the community forest are summarised in Table 1.

The monetary values are present values calculated over the UK Government's recommended 60 year timescale. A present value (PV) is the sum of the expected future annual values over that timescale. The future annual values are based on the current annual value, incorporating future trends where possible, and applying discounting. Discounting reduces the relative value of future benefits, using UK Government recommended discount rates (3.5% declining)<sup>1</sup>.

The results in Table 1 show that the community forest could create significant value for West Cumbria, of approximately £157 million over 60 years. Within this impact:

- There is a loss of commercial value of food production (£30m) from the agricultural land converted to woodland.
- A minority (1/3<sup>rd</sup>) of the woodland is assumed to be used for productive forestry, half of which is conifers, whose output has been valued.
- There is a significant impact on climate change. The new woodland would sequester approximately 1.7 million tonnes of CO<sub>2</sub>e over 60 years, valued at £136m (PV60). The foregone agricultural production would result in 330,000 tonnes of CO<sub>2</sub>e less emissions (PV60 £25m). However, these avoided agricultural emissions might be displaced to other production systems, so are not necessarily an impact of the community forest.

<sup>1</sup> \_\_\_\_\_

UK Government recommended approaches are drawn from the HM Treasury Green Book:  
[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/938046/The\\_Green\\_Book\\_2020.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/938046/The_Green_Book_2020.pdf)

- There are substantial recreation and health values estimated. These result from the increased accessibility of land within the community forest, and location of woodland sites close to communities.
- The value of air quality regulation is relatively low. This is due to the relatively good air quality in West Cumbria, and to the service being proportionate to the age of the woodland, with newly created woodlands only providing the maximum level of service after 40 years.

**Table 1: Estimated asset values generated by West Cumbria Community Forest**

2020 prices		£million, PV60		
Asset values (monetised)	Valuation metric	Value to Businesses	Value to the rest of society	Total
Food provision	Arable income	(7)		(7)
	Livestock income	(26)		(26)
Timber	Value of softwood removals	3		3
Air quality regulation	Value of PM2.5 removal by woodland		1	1
Carbon sequestration	Value of CO2e sequestered in woodland		136	136
	Value of CO2e emitted by livestock		25	25
Recreation	Adult recreation welfare value (under 3 hours)		179	179
Physical health	Avoided medical treatment costs		59	59
<b>Total gross asset value</b>	<b>Mix of values</b>	<b>(30)</b>	<b>400</b>	<b>369</b>

## 1.3 Investment Returns

The community forest scenario suggests a range of possible income streams, which could provide returns to different investors and funders:

1. An Expression of Interest, has been through the first stage of assessment with the Community Forest Trust, and if that is successful it will go through a further assessment with Defra for funding through the DEFRA Nature for Climate Fund.
2. Value of carbon: The value of carbon in Table 1 is based on the UK Government guidance on valuing non-traded Carbon from August 2021. It does not reflect new guidance released 2<sup>nd</sup> Sept 2021. The new woodland in the Community Forest is estimated to sequester 1.7million tonnes of carbon over 60 years. Using a market price of future carbon credits at approx. £45/tonne of CO2e (average over last 6 months<sup>2</sup>), could be **worth £24million (PV60) per year**. A full assessment of planting cycles and woodland carbon code eligibility is needed to accurately estimate potential revenues.
3. Health and wellbeing benefits in terms of recreational welfare and avoided medical costs as a result of enabling physical activity, totalling £328m. These benefits can potentially motivate investment from public health bodies (NHS Trust/ Local Authorities) and others with funds to support community wellbeing.
4. Value of other public benefits – e.g. landscape, biodiversity, water quality, flood management, etc. Several of these benefits can be quantified:
  - The woodlands would be estimated to store 1.16million m<sup>3</sup> of water each year, contributing to flood risk management
  - Creating native woodland on low-distinctiveness agricultural habitats would likely generate biodiversity units under Defra's Biodiversity Metric. These units have potential

<sup>2</sup> [Carbon Price Viewer - Ember \(ember-climate.org\)](https://ember-climate.org/)

value to developers to fulfil planned biodiversity net gain requirements (as proposed under the Environment Bill).

These benefits may be used to secure public funding, or may generate revenue through future markets, but do not yet have an established market price.

## 1.4 Background

- Proposals for a Coastal Community Forest in West Cumbria have been developed by Copeland Council, Allerdale and Barrow Councils, along with National Trust and the Cumbria Wildlife Trust. If successful, West Cumbria could become part of one of the largest environmental regeneration projects in England - the nationwide Community Forest programme. So far 10 Community Forests<sup>3</sup> have been created across England with the idea they are funded by long-term investments, delivered by a partnership of public, private and voluntary sectors.
- The aim of the community forest in West Cumbria is to promote economic and social regeneration through the regeneration of woodland areas, and the creation of new woodlands.
- An application has been made for funding to DEFRA's Nature for Climate Fund. This would only fund the first five years and would lead to an estimated 500-1,000ha of new woodland creation.
- Further funding sources need to be identified to generate the investment required to create the target of 7,000 + hectares of new woodland.
- Cumbria's woodland cover is 9.9% and this is below the national average of 12%. Cumbria currently has a woodland coverage of 58,500ha (of woodland over 0.5ha). The ambition is to increase the cover to 17% from the current level.
- Over 25 years, creation of 7,000 - 10,000ha of new woodland through the Community Forest would increase woodland cover by 1.2 - 1.7 percentage points, or up to a quarter of the 17% target. This opportunity is aligned to the Cumbria LEP Rethink agenda for a green recovery in Cumbria, alongside local implementation of the Government 25 Year Environment Plan (25YEP) and providing solutions to tackle the nature and climate crisis such as increasing carbon sequestration and increasing public awareness around climate change.
- More details on the extent, condition and benefits from woodland and other natural capital in Cumbria can be found in the draft [Baseline Natural Capital Account](#), produced as part of the Green Investment Plan Cumbria.

<sup>3</sup> Community forest in this context means community access (connecting more people to nature) Community forests are typically located near urban areas, and are intended not simply to plant trees, but to connect the adjoining urban areas with woodland and provide opportunities for people to engage with nature, ameliorate climate change, provide habitat for nature and increase wellbeing.