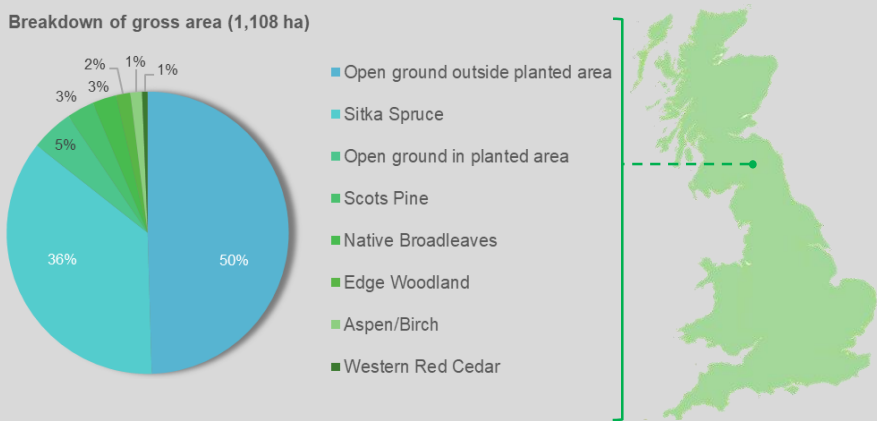








1. Overview

- This study was the first application in the UK of the Natural Capital Protocol's Forest Products Sector Guide, which aims to show how forestry depends on and impacts nature.
- The study examined a forest creation project at Larriston in the Scottish Borders, on the site of a former upland sheep farm.
- Planting at Larriston was completed in 2017.



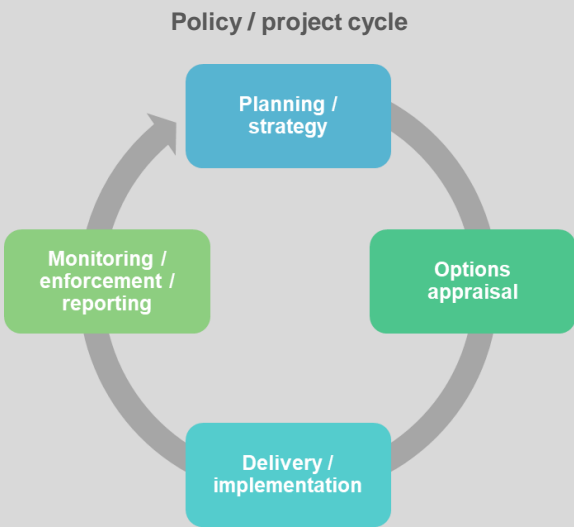
2. Assessment of material impacts and dependencies on natural capital

Impact / dependency	Private value	Societal value	Approach to valuation	Over 50 years					
				Physical flow			Monetary flow (present value)		
				Estimate	Unit	Confidence	Estimate	Unit	Confidence
 Timber	✓		Market valuation	190	thousand tonnes	High	2,500	£k	Moderate
 Carbon sequestration		✓	Cost-based	150	thousand tonnes of CO <sub>2</sub> equivalent	High	9,100	£k	High
 Flood risk protection		✓	Replacement cost	3,000	thousand m <sup>3</sup>	Moderate	600	£k	Low
 Recreation		✓	Not assessed due to limited visitor data						
 Aesthetics		✓	Not assessed due to limited economic valuation evidence						
 Biodiversity		✓	Stated preference (contingent ranking)	-	-	Low	7,400	£k	Low

Notes: Monetary values are expressed in 2019 prices. Present value estimates are discounted in line with the HM Treasury Green Book (2018). Confidence rating is based on the suitability of the approach and the strength of the evidence. Biodiversity is assessed in terms of its non-use value which is the value associated with knowing that biodiversity exists rather than from engaging with it in some way. The value assumes a distance decay effect i.e. that, while non-use values do not just apply to nearby populations, the values may diminish the further individuals are from the change in biodiversity. The contingent ranking method involves respondents ranking a number of scenarios that are presented to them individually.

3. Key insights from a natural capital assessment in the forest sector

- Complements conventional Environmental Impact Assessments
- Provides evidence to assess performance under the UK Forestry Standard (UKFS)
- Helps assess different design options at the planning stage
- Helps when engaging with stakeholders and local communities
- Informs the feasibility of developing payments for ecosystem services (PES) schemes
- Makes the case for forest creation as a form of natural capital investment to achieve biodiversity targets and net zero carbon emissions
- Helps with monitoring efforts and informs future management of forests including identifying lessons learnt for future projects
- Demonstrates returns on investment in forest creation projects



For the full project report, please [click here](#)