

Dadansoddi ar gyfer Polisi



Analysis for Policy



Llywodraeth Cymru
Welsh Government

SOCIAL RESEARCH NUMBER:

6/2023

PUBLICATION DATE:

16/02/2023

Understanding social value in woodland asset transfer to third parties: a review of the benefits, costs, and risks: Final Report

Mae'r ddogfen yma hefyd ar gael yn Gymraeg.

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Understanding social value in woodland asset transfer to third parties: a review of the benefits, costs, and risks: Final Report
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Full Research Report: Johnson, V., Hanes, E., Robertson, A., and Lang, E. (2023). *Review of the benefits, costs and risks of transferring woodland assets to third parties*. Cardiff: Welsh Government, GSR report number 6/2023.
Available at: <https://www.gov.wales/understanding-social-value-woodland-asset-transfer-review>

Views expressed in this report are those of the researcher and not necessarily those of the Welsh Government

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Glossary

Acronym/Key word	Definition
BAU	Business as Usual
BEIS	Department for Business, Energy & Industrial Strategy
CAT	Community Asset Transfer
CWG	Community Woodland Group
Defra	Department for Environment, Food & Rural Affairs
DfT	Department for Transport
ENCA	Enabling a Natural Capital Approach
GHG	Greenhouse gases
GI-Val	Green Infrastructure Valuation Tool
HACT	Housing Association Charitable Trust
LERC	Local Environmental Record Centre
LISS	Low Impact Silviculture Systems
OECD	Organisation for Economic Co-operation and Development
ONS	Office of National Statistics
OrVAL	Outdoor Recreation Valuation Tool
NEVO	Natural Environment Valuation Tool
NRW	Natural Resources Wales
QALY	Quality Adjusted Life Year
Steer ED	Steer Economic Development
TAG	Transport Appraisal Guidance
TOMS	Themes Outcomes and Measures
VfM	Value for Money
WGWE	The Welsh Government Woodland Estate
WSE	Woodland Social Enterprise
WTP	Willingness to Pay
WTA	Willingness to Accept

1. Introduction

Context of the Work

- 1.1 Woodlands account for 15% of the Welsh land area.¹ They provide a range of potential benefits and ecosystem services, including producing timber, recreation, and tourism, supporting biodiversity, enhancing air quality, creating jobs, removing carbon from the atmosphere, and improving both physical and mental health. The Welsh Government Woodland Estate (WGWE), managed by Natural Resources Wales (NRW), covers 126,000 hectares or approximately 40% of the total Welsh woodland areas. The remaining woodland area is privately owned.²
- 1.2 Community forestry is broadly defined as forest management that has ecological sustainability and local community benefits as central goals, with some degree of responsibility and authority for forest management formally vested in the community (Charnley and Poe, 2007). Community forestry has developed in the UK over the past 40 years. Key drivers for the emergence of community forestry within the UK include a combination of local interest, innovation, and policy interventions such as Community Forest Partnerships (England) and the Cydcoed programme (Wales). Social and political processes and priorities across devolved governments and within communities have evolved across both geographies and time resulting in a great variety of relationships between communities and woodlands in terms of resource management, tenure, group organisation and finances and over 650 community woodlands in the UK (Lawrence and Ambrose-Oji et al., 2014; 2013).
- 1.3 The Welsh Government have commissioned Steer Economic Development (Steer-ED) to examine the evidence relating to the environmental, social, and economic impacts and associated risks of woodland asset transfer to community or third sector organisations, including potentially at below market rates. The outputs of this work, discussed further below, intend to provide an evidence base to NRW and support them in assessing these impacts.

¹ [Warren-Thomas, E., Henderson, E., \(2017\) 'Woodlands in Wales: a quick guide' National Assembly for Wales Research Service, Research Briefing.](#)

² Forestry Statistics 2021, Forest Research Forestry Statistics 2021 - Forest Research

1.4 The impetus for this work came, in part, from a proposed project originating from *The Green Valleys*, a community organisation, who proposed the *Skyline* project. The *Skyline* project involved a proposal for the transfer of ownership of 80 hectares of woodland in the Rhondda valley to a local community group, who would take responsibility for the management of the woodland and also benefit from the land (from increased access, economic benefits from timber sales, and the opportunity to use the woodland for other purposes). In line with government guidance from *The Green Book*³ and *Managing Public Money*⁴, in order to justify a decision of this nature, it will first be necessary to consider the potential impacts and value for money implications by examining options through:

- Identification of the costs, benefits and risks that may be associated with a proposal against the counterfactual (management being retained by NRW) and, where relevant, other potential alternatives;
- Quantify and, where possible, monetise these costs, benefits, and risks; and
- Provide a suitable evidence base to justify the identification, quantification and monetisation of costs, benefits, and risks.

1.5 At present, there is no existing framework in place within NRW to support the above requirements in relation to woodland asset transfer.

Scope of this report

1.6 This report is the final output of the project to review the benefits, costs and risks of transferring woodland assets to third parties (e.g., sale of timber, or transfer of property rights through different management and ownership arrangements) and to understand the evidence on the social value of woodland asset transfer. The project specification was to scope the available data and methods that might be used by NRW to support future appraisal of projects (including their social value) in relation to community or third sector access to woodland and/or timber on the WGWE. This might include transfer of ownership (including possible short or long-term leasing; and conditional or minimal-condition transfers, management, or sale at below market prices). This report focusses on addressing the seven research questions

³ HM Treasury Green Book: Central Government Guidance on Appraisal and Evaluation (2022) – GOV.UK (www.gov.uk).

⁴ Managing Public Money (2022) – GOV.UK (www.gov.uk)

presented in Table 1-1 and concludes with a signposting guide to support NRW with the appraisal, monitoring, and evaluation of benefits, costs, and risks associated with woodland asset transfer. The guide sets out expected outcomes, factors that might affect the (extent of) the achievement of the outcomes, and the confidence in the evidence that transfer may lead to these outcomes. The guide also includes suggested approaches for quantification and, where relevant, monetisation and the confidence in these approaches.

1.7 The signposting guide is aligned and consistent with HM Treasury Green Book⁵, the Department for Environment, Food & Rural Affairs' ENCA (Enabling a Natural Capital Approach)⁶ guidance and also considers the potential role of Welsh TOMs (Themes Outcomes and Measures). It is recognised that due to the range of transfer arrangements and associated conditions of transfer, as well as factors such as difference in project scale, location and focus, that outcomes (i.e., benefits, costs and risks) are likely to be project-specific so approaches based on application of a uniform set of indicators and coefficients are unlikely to be generally appropriate.

1.8 The outcomes from this project will also help to meet:

- Commitments within the 2021-2026 Programme for Government⁷ which includes, amongst others, a commitment to “Make our cities, towns and villages even better places in which to live and work”. Specifically, one of the pledged actions to help meet this commitment involves supporting community-led initiatives. The opportunity to appropriately manage, sell or use woodland/timber could help to support and strengthen some communities;
- NRW's requirements to sell timber in an open and transparent way, demonstrating best value for money;
- The requirements of the Wellbeing of Future Generations Act (Wales) (2015)⁸ by, for example, improving the economic, social, environmental, and cultural wellbeing of Wales. The Act sets into legislation a range of commitments to improve social, cultural, environmental, and economic well-being. In the context of this act, the recognition and appropriate evidencing of the potential wider

⁵ The Green Book: appraisal and evaluation in central government (2022) – GOV.UK (www.gov.uk)

⁶ See Enabling a Natural Capital Approach (ENCA) - GOV.UK (www.gov.uk)

⁷ Welsh Government Programme for Government - Update - GOV.WALES (www.gov.wales)

⁸ Wellbeing of Future Generations Act (Wales) (2015) – LEGISLATION.GOV.UK (www.legislation.gov.uk)

benefits of woodland use, for example mental and physical health benefits, and community engagement/empowerment benefits, should be recognised;

- The strategic objectives outlined in the Woodland for Wales Strategy (2018)⁹, including the emphasis on ‘Woodlands for the people’ and providing greater opportunity for community involvement in woodland, such as participation in decision-making and woodland management; and
- NRW’s commitment to Planet, People and Prosperity within their Commercial Strategy (2021-2026)¹⁰ which seeks to align with the Wellbeing of Future Generation Act and maximise wellbeing. This includes the sale of timber.

⁹ Woodlands for Wales - The Welsh Government’s Strategy for Woodlands and Trees (2018) – GOV.WALES (www.gov.wales)

¹⁰ Commercial Strategy 2021-2026 – NATURALRESOURCES.WALES (www.naturalresources.wales)

Table 1-1: Research Questions

Number	Research Question
1	What are the potential social, economic, and environmental benefits, costs and risks of providing local community groups with management of NRW woodlands and timber stock, compared to the baseline of being managed by NRW? This should include considering: Local economic and employment benefits Carbon sequestration and storage Woodland resilience and biodiversity Community wellbeing and identity Impacts on disadvantaged communities Other relevant impacts and considerations, including distributional effects.
2	How do these benefits (and the costs and risks) vary by project- and location-specific factors?
3	What factors are key influences on outcomes achieved, durability of outcomes, and risks to outcomes delivery?
4	What are the potential unintended consequences of allowing community groups to manage NRW timber stock? In particular, consideration should be given to evidence on possible effects on transferred natural asset extent and condition.
5	Under what conditions might providing local community groups with woodland and/or timber stock be potentially net beneficial in terms of public value (i.e., do the benefits outweigh any economic gains from usual selling practice)?
6	How can these potential benefits, costs and risks be practically and appropriately assessed and quantified by organisations such as NRW, including under likely project- and location- specific factors?
7	What effects could such transfers have on the woodland management operations of NRW?

Source: Steer-ED, 2022

Report outline

- 1.9 This final report presents the findings from our evidence review and initial stakeholder consultations which was set out in an earlier interim report intended for internal use and builds on this by reviewing these findings in tandem with further stakeholder consultations with NRW staff and community woodland groups (CWG). Drawing on the evidence gathered through research, this report concludes with practical recommendations for NRW to appraise the benefits, costs, and risks of potential woodland asset transfer proposals.
- 1.10 The remainder of the report is structured as follows: Section Two presents the methodology adopted for the evidence review and stakeholder consultations; Section Three through Five report the findings and insights from the evidence

review, stakeholder interviews, concluding with a logic model presented in Section Six; Section Seven provides a signposting guide to inform the development of an appraisal. The report concludes in Section Eight which presents key conclusions of this work and recommended next steps for the Welsh Government and NRW.

2. Methodology

2.1 The following chapter presents the methodology undertaken to deliver this project. The project included three key stages:

- Scoping consultations to gain a better understanding of the context of the work, through discussion with the commissioning body (Welsh Government, intended end-user (NRW) and other key stakeholders;
- A non-exhaustive literature review of the evidence for social, environmental, and economic benefits, costs, and risks of giving community organisations the opportunity to manage woodland; and harvest and sell timber stock; and
- Strategic consultations with Welsh community woodland groups, NRW place-based teams, and Forestry and Land Scotland.

2.2 Drawing on the insights from the consultations and evidence review, a logic model was developed to show how woodland asset transfer is expected to work in practice by mapping out the causal chains from inputs to impacts. The logic model was then used to inform the development of a ‘signposting’ guide to support the development of an appraisal framework for proposals which involve the transfer of woodland asset management from NRW to community or third sector organisations in Wales, potentially at below market prices.

Scoping Consultations

2.3 During the early stages of this project, five scoping/positioning consultations were conducted (see Table 2-2). The purpose of these consultations was to gain a better understanding of the context of the work, through discussion with the NRW and other key stakeholders. As such, a sampling methodology was not required for this section of work – consultees were selected by the Welsh Government based on their knowledge and engagement with the project. The selected stakeholders were from a range of different organisations and with differing interests in the project, thus providing a diversity of views.

2.4 Consultations were undertaken by the study’s Project Director, using a semi-structured approach. A standard topic guide was developed for use with all consultations, and this is included at Appendix B. Detailed notes of the discussion

were taken during the interview, and these were then consolidated and synthesised to generate the summary of findings presented in this report. In the synthesis presented, we have attempted to report consultees' statements, views, and beliefs with fidelity to their original statements. In some cases, consultees' statements offer different perspectives or provide only a partial picture related to interviewees' areas of knowledge – these instances have been highlighted and explanatory commentary provided wherever possible.

Table 2-1: Details of scoping consultations conducted

Organisation	Rationale for Selection	Date
NRW, Commodity Sales & Marketing	To provide details of NRW's existing and planned approach to forestry management and asset transfer with respect to community groups.	22 April 2022
Welsh Treasury	To provide details of the Treasury's approach to the identification, quantification and monetisation of costs and benefits in the environmental and community domains.	26 April 2022
The Green Valleys	To provide details of the Skyline project, a community woodland proposal which formed part of the impetus for this research study.	22 April 2022
Llais y Goedwig	To provide the perspective of Llais y Goedwig, a representative body working on behalf of community woodland groups	29 April 2022
Defra	To provide details of Defra's approach to the identification, quantification and monetisation of costs and benefits in the environmental and community domains.	20 May 2022

Source: Steer-ED

Evidence Review: Search Terms and Search Protocol

2.5 Steer-ED undertook a non-exhaustive evidence review. It was not a systematic review due to the time available, but rather a rapid evidence review with limited scope. We followed best practice by:

- Developing a highly specific search strategy;
- Piloting search strings, and recording results to refine our search strategy;

- Developing evidence inclusion and exclusion criteria (see Table 2-1) and recording the rationale for exclusion and inclusion; and
- Supplementing our search strategy with a ‘Call for Evidence’ (see Appendix A) and consultations with key stakeholders.

Objectives of the review

2.6 The objectives of this evidence review were to:

- Identify a comprehensive list of possible social, environmental, and economic benefits, costs, and risks of giving community organisations the opportunity to manage woodland; and harvest and sell timber stock;
- Understand how different asset transfer arrangements and conditions may alter the impacts and delivered outcomes, including potential unintended consequences;
- Evaluate the quality of the evidence, robustness of the methodologies and valuation approaches used;
- Identify gaps in the literature to inform stakeholder consultations and future research; and
- Inform recommendations for a practical assessment approach for NRW to use in robustly appraising the benefits, costs, and risks of community asset transfer of timber stocks ensuring consistency with relevant appraisal guidance, for example the HM Treasury Green Book.

Key definitions

2.7 The following definitions of woodland/community woodland were adopted for this review:

2.8 **Woodland:** Whilst some studies distinguish between woodland and forests, for others these terms are used interchangeably. For example, Lawrence and Molteno (2012) report that woodland tends to refer to smaller areas, with less (or no) emphasis on timber production compared to a forest.

2.9 Drawing on the ONS definition of woodland, woodland is defined as,

“...tree-covered areas that include plantation forests, more natural forested areas, and lower density or smaller stands of trees.” (ONS, 2020, p. 13)

2.10 As such, we make no explicit distinction between woodland and forests. Throughout this report, we refer to woodland as both productive and unproductive areas within the WGWE and managed by NRW, irrespective of size. When analysing the findings from these sources we use the terminology which the study uses, for example, Woodland, Forest, Timber.

2.11 **Community woodland:** Whilst there are a range of definitions of community woodland, we draw on the definition provided by Barlagne et al (2021),

“...a form of natural resource governance in which woodland management is entirely or partially undertaken by local communities. It is characterised by a wide range of networks, contractual arrangements, and public-private partnerships involving local communities and their representative bodies, community development companies, private land-owners [and public bodies].”

2.12 This definition explicitly recognises that community woodland is defined by some form of control over the management decisions of the woodland, however, it also recognises the diversity of contractual arrangements and partnerships across community woodland groups in the UK.

Primary research question

2.13 This non-exhaustive literature review aimed to identify evidence to address the following primary question:

What are the potential social, economic, and environmental benefits, costs, and risks of providing local community groups with management of NRW timber stock compared to the baseline of being managed by NRW?

Secondary questions

2.14 We have used the primary research question to frame and structure our search strategy. The literature and evidence gathered through our evidence review, initial strategic consultations and stakeholder consultations was used to inform the following six secondary research questions:

- How do benefits (and the costs and risks) vary by project- and location-specific factors?

- What factors are key influences on outcomes achieved, durability of outcomes, and risks to outcomes delivery?
- What are the potential unintended consequences of allowing community groups to manage NRW timber stock? In particular, consideration should be given to evidence on possible effects on transferred natural asset extent and condition.
- Under what conditions might providing local community groups with timber stock be potentially net beneficial in terms of public value (i.e., do the benefits outweigh any economic gains from usual selling practice).
- How can these potential benefits, costs and risks be practically assessed and quantified by organisations such as NRW, including under likely project- and location- specific factors?
- What effects could such transfers have on the woodland management operations of NRW?

Search strategy

- 2.15 Due to the limited timeframe of this review, a highly specific search strategy was developed. Following an initial survey of the literature, we found potentially relevant studies spread across both grey¹¹ and academic (peer-reviewed) literature. Given this, we have included both academic and grey literature identified through Google Scholar searches, cited reference searches and manual bibliographic searches of identified papers.
- 2.16 Search strategies were piloted, recorded, and revised iteratively based on the relevance of the first 100 'hits'. In addition, we augmented our search strategy with a 'call for evidence' circulated to individuals identified through a stakeholder mapping exercise.
- 2.17 For a study to be considered within this evidence review, a primary study had to match key concepts within the review question, in addition to practical limitations given the scope of this evidence review (for example date range and language requirements). Table 2-2 below outlines our study inclusion criteria.

¹¹ Grey literature refers to documents produced and published by governmental agencies, academic institutions and other groups that are not distributed or indexed by commercial publishers.

Table 2-2: Study inclusion criteria

Domain	Include	Exclude
Date	Published between January 2000 and April 2022.	Is published before Jan 2000 and after April 2022
Type of study	Literature is empirical in nature (i.e., case control studies, comparative case studies, single case studies and qualitative studies.)	Theoretical, methodological,
Location	Location of study is UK (England, Scotland, Wales, NI), Europe and N. America (less priority). Similar biogeography and socio-economic profile to the UK.	Study is non-OECD/ dissimilar biogeography to UK (e.g., Tropics/ Developing country)
Relevant subject(s)	Study focus is woodland/ forestry/ silviculture/ timber; and communities responsible for managing them.	Other natural resources.
Types of interventions	Transfer of asset to community ownership or management.	Types of interventions
Outcomes	Studies where biophysical, economic, financial, social, and participatory, outcomes are evaluated.	
Language	Study should be published in English or Welsh.	Study is not published in English/ Welsh.

Source: Steer-ED, 2022

Stakeholder Consultations

2.18 Following completion of the scoping consultations and evidence review, and to complement the interim findings, a further nine consultations were conducted with Welsh CWGs, NRW place-based teams, and Forestry and Land Scotland see Table 2-3.

2.19 The purpose of these consultations was to:

- Understand how the different asset transfer arrangements might enable different additional benefits, risks and costs depending on scheme purpose – in the view of CWGs interviewed;
- Explore who the range of direct and indirect beneficiaries might be as a result of woodland asset transfers to community groups/third sector;

- To understand what the range and scale (and durability) of additional benefits are considered to be for each beneficiary type (for example, NRW, CWG, wider community), where feasible;
- To understand how each potential benefit could be measured to understand the extent to which they are additional and attributable to the transfer;
- To understand whether and, if so, how community groups/third sector assess their costs and risks of entering into an asset transfer arrangement; and
- Consider potential challenges to NRW being able to appropriately quantify and/or robustly and proportionately assess benefits, costs and risks using suitable approaches and methods.

2.20 A stakeholder mapping exercise was undertaken to identify key stakeholders across three stakeholder categories: NRW place-based teams (n=4), Welsh community/third sector groups (n=4) and Non-Welsh Community/third sector groups (n=1). In particular, stakeholders were identified to ensure a diversity of views were captured. Welsh community/third sector groups were selected to ensure views reflected a range of projects (e.g., objectives and activities) and ownership forms of asset transfers given the diverse forms these groups can take. It is noted, however, that due to the relatively small sample size, these views are indicative only.

2.21 The consultations were undertaken by Social Value Portal – authors of the Welsh TOMs (Themes, Outcomes and Measures social value measurement framework) and the Project Director based in Steer ED, using a semi-structured approach. A standard topic guide was developed for use with all consultations, and this is included at Appendix C. Detailed notes of the discussion were taken during the interview, and these were then consolidated and synthesised to generate the summary of findings presented in this report.

Table 2-3: Details of stakeholder consultations conducted

Organisation	Rationale for Selection	Date
NRW, Community Permissions Programme	Specialist Advisor for permissions, sits within Land Stewardship – between policy and delivery. Role focusses not on the decision making of each permission, but on the process for it.	9 Aug 2022
NRW, Partnership, Access and Recreation	Part of a group of experts to link between Policy and Operational delivery; stakeholder engagement, grant programme, 'Operational Place Plan' and supports community relations with NRW estate.	13 July 2022
NRW, Senior Officer Land Manager	Estate Manager for woodland estate e.g., fences, boundaries, tree safety, footpaths.	14 July 2022
NRW, Recreation Team	Recreation focussed on enabling access to woodlands safely, safety compliance for public sites.	10 August 2022
NRW, Senior Specialist Surveyor	Participated at the outset of Community Management Agreements. Plays a part in overseeing CWG agreements once they're established.	11 Aug 2022
Welcome to our Woods	A CWG with a conditional lease arrangement, looking to increase the scope of their current arrangement.	30 June & 13 July 2022
Elwy Working Woods, Cooperative	Social enterprise that has purchased harvested timber from NRW in the past but has no current management arrangement in place.	15 July 2022
Llyn Parc Mawr	CWG with a long-term conditional lease arrangement	1 July 2022
Pobl y Fforest	Lease arrangement with NRW. No timber management but run community training and events.	15 July 2022
Forestry and Land Scotland	Have been evaluating community asset transfer (of woodland) for over 5 years as part of the Community Empowerment (Scotland) Act 2015.	6 July 2022

Source: Steer-ED

Development of Logic Model

The aim of the logic model

- 2.22 The aim of a logic model is to clearly show how an intervention is expected to work in practice by mapping out the potential causal chains of an intervention from inputs to impacts. It is a methodology widely used in evaluation and is key methodological process identified within HM Government's Magenta Book. The logic model follows each step of the causal chain, mapping out how the inputs are expected to lead to activities which deliver outputs, and in follow-on steps these lead to outcomes and, ultimately, impacts.

Logic Model Development

- 2.23 The logic model was developed by analysing NRW's input: transferring property rights (through long-term leasehold arrangements) or permitting access/ use of woodland to local community groups. Activities, outputs, outcomes, and impacts have been identified from researching past literature, consulting key and strategic stakeholders. Only benefits (positive outcomes and impacts) are depicted within this logic model here. Risks and costs are presented in a separate, accompanying table (discussed below). Through this activity we gained a thorough understanding of the range of activities that may be associated with different types of community woodland arrangements, and the impact each arrangement style can potentially have on the woodland, community, and wider environment. The evidence provided by the literature review and stakeholder consultations were used to get a sense of the potential strength of causal links which are depicted in the logic model below.

Risk and Cost Table

- 2.24 In addition to the benefit logic model described above, a table of associated risks and costs has been developed which identifies and outlines potential negative implications of permitting the use / access of woodlands to community groups and/or the transfer of woodland property rights into local group/community ownership. Costs and risks of activities identified in the benefit logic model are presented separately, to enhance the readability of the model. The logic model should be viewed alongside this table to provide a clear indication of the potential benefits, costs, and risk of woodland asset transfers.

Development of Recommendations (signposting guide)

2.25 The recommendations provided in this report have been developed by drawing together our findings across all study workstreams, our analysis included:

- Synthesising information across all workstreams;
- Using a collaborative process with the study Steering Group to establish the most useful format for final outputs;
- Understanding the needs/requirements of NRW, a signposting guide was understood to be the most helpful presentation of the evidence collected given findings from the evidence review that highlight the high degree of heterogeneity of projects (e.g., CWG objectives, activities, initial condition of the woodland). Building on best practice across government – in particular the HM Treasury Wellbeing Guidance for Appraisal¹²

2.26 Through this process, three key strands of potential benefits relating to the transfer of woodland to community groups were identified: Biophysical/Environmental, Cultural and Social, and Local Economic Stimulus. Each strand has a few (to several) benefit types, the valuations for which are presented in Chapter 7. To reflect where gaps in evidence or the quality of available evidence exist, we have applied a RAG (red, amber and green) rating, drawing on Binner et al. (2017), to the strength of evidence for both quantifying the impact (the pathway from intervention to outcome) and monetising the impact. This RAG rating scheme is presented in Table 2-4 below.

Table 2-5: RAG Rating Scheme

Rating	Description
Green	Strong evidence
Amber	Good evidence, but some gaps
Red	Major gaps in evidence

Source: Steer-ED, adapted from Binner et al. (2017)

¹² Wellbeing Guidance for Appraisal: Supplementary Green Book Guidance (2021) - GOV.UK (www.gov.uk)

2.27 The following three sections (Section 3, 4 and 5) present the findings from the scoping consultations with key stakeholders the evidence review and wider stakeholder consultations with community woodland groups, NRW and government economists.

3. Findings: Scoping Consultations

Background and Context

3.1 The impetus for this work came, in part, from a proposed project originating from The Green Valleys, a community organisation, who proposed the Skyline project. The Skyline project involved a proposal for the transfer of ownership of 80 hectares of woodland in the Rhondda valley to a local community group, who would take responsibility for the management of the woodland and also benefit from the land (from increased access, economic benefits from timber sales, and the opportunity to use the woodland for other purposes). The project, in its original formulation, was not granted approval. According to the consultee we spoke to from the Skyline project, this was due to concerns raised by the Welsh Audit Office that it would not be possible to conduct a Green Book compliant value for money assessment due to limitations in the evidence base. NRW have responded, however, to state that the Welsh Audit Office did not formally raise such concerns – the decision was taken by NRW’s Board and CEO as Accounting Officer. In line with government guidance from The Green Book and Managing Public Money, in order to justify a decision of this nature, it will first be necessary to consider the potential impacts and value for money implications by examining potential options through:

- Identifying costs, benefits and risks that may be associated with the proposal against the counterfactual (of the process or management being retained by NRW) and, where relevant, other potential alternatives;
- Quantifying and, where possible, monetising these costs, benefits, and risks; and
- Provide a suitable evidence base to justify the identification and quantification.

3.2 The 2015 Well-being of Future Generations (Wales) Act also sets into legislation a range of commitments to improve social, cultural, environmental, and economic well-being. In the context of this act, the recognition and appropriate evidencing of the potential wider benefits of woodland use, for example mental and physical health benefits, and community engagement/empowerment benefits, should be recognised. There is a growing body of evidence to support monetisation of such benefits as demonstrated by, for example, Defra’s recently published ENCA

guidance¹³ (supplementary guidance to the Green Book, first published in 2020) which uses well-known techniques such as ‘stated preference’ and ‘revealed preference’ to put values to environmental effects. These methods although widely used come with some recognised challenges. These include:

- The extent of data requirements, such as case specific data, may not be feasible to collect and also require specialist technical expertise to apply. As such, appraisal may not be proportionate; and
- Large differences between values generated by different appraisal techniques can occur in some cases.

3.3 Developing the evidence base to address key gaps, and utilising available information and methods will support decisions on projects such as *Skyline* to be made in an informed, robust, and defensible way in the future, allowing for consideration of a broader range of costs and benefits than NRW may have considered in the past. For example, some of the consultees stated that, despite NRW’s obligations around the preservation of forests for social benefit, actions to meet these obligations have tended to be focused on financial returns from the sale of timber.

3.4 In parallel to this project, NRW are also developing an ‘alternative timber sales’ initiative. Two years ago, NRW made a commitment that 30% of the timber produced each year would be sold via alternative methods. This may have the effect of widening the consumer base (potentially to customers other than those who traditionally buy large quantities in bulk, such as sawmills). NRW are currently developing options for how the alternative timber sales function may operate, which could include, for example, providing subsidised rates to smaller customers. Findings from the current project on the benefits, costs, and risks of woodland asset transfer to third parties may also be relevant for NRW to consider as they develop the alternative timber sales programme.

Benefits

3.5 Consultees were asked to suggest the potential benefits from the transfer of woodland assets to community or third sector organisations. A summary of the

¹³ See Enabling a Natural Capital Approach (ENCA) - [GOV.UK](https://www.gov.uk)

benefits suggested is reported below (note that all benefits reported by consultees are presented here, whether reported by only one or by multiple):

- **Biodiversity and other Environmental Benefits** – some consultees suggested that alternative methods of woodland management to ‘clear fell’ (in which trees are felled en-masse on a forty-year cycle) could potentially result in positive biophysical impacts, such as increased biodiversity. Specifically, ‘clear fell’ results in loss of habitats, and the production of a forest with only a single species of tree (a monoculture crop) also has limiting effects for biodiversity. In contrast, an alternative management style (known as a ‘low impact silviculture system’ (LISS) or ‘continuous cover forestry’) in which a range of tree specimens are grown and harvested manually at intervals avoids habitat destruction and allows for development of a more diverse ecosystem. It also avoids risks of soil degradation and flooding and provides a more stable source of carbon capture. Whilst NRW also practises a range of woodland management approaches, including LISS, some consultees proposed that a community group taking over stewardship of a forest asset may favour this lower impact style of forestry management.¹⁴ The initial condition and incumbent use of the woodland asset would, however, affect the wider impact on public value. For example, the majority of consultees cited instances where marginal areas of woodland – those on steep slopes or with restricted access – are being left relatively ‘unmanaged’ by NRW, leading to non-optimal growing conditions (for example disease, fallen trees and insufficient light to permit healthy growth). This suggests that there may be scope for biophysical improvements to undermanaged woodlands, where asset transfer involves sub-optimally managed woodlands within the WGWE.
- **Health Benefits** – the majority of consultees highlighted that there are physical and mental health benefits associated with the use of woodland – whether that be for walking or leisure pursuits, or as part of engagement in forest stewardship activities. It should be noted that these benefits are not reliant upon transfer of ownership in order to arise. Furthermore, transfer of ownership could in fact have a negative impact on existing access arrangements, for example, by

¹⁴ This management style was explicitly stated as a preference by the CWG consultees.

reducing access to or quality of the woodland (and this concern was raised by the NRW consultee). However, consultees raised examples where community ownership/stewardship had resulted in a greater focus on public accessibility to the woodland – for example through the creation of new footpaths, benches, or signposting, often making use of volunteers to undertake installation.

- **Community Benefits** – hardest to quantify, these benefits derive from community engagement with the woodland – through a sense of empowerment and involvement with decisions that affect the local environment. Some consultees explained that growth in individuals’ confidence, pride of place, and sense of community (collectively contributing to ‘social capital’) may all result from community stewardship of woodlands, and even more so from transfer of ownership due to the enhanced sense of ownership and responsibility; and the significant collective decision making required when taking legal responsibility for an asset. There may also be broader cultural benefits, for example from the development of forest schools, performance spaces, or using the forest as a place to grow food in a sustainable way.
- **Economic Benefits** – one consultee cited the possibility of creating local jobs through the management of the woodland, although the consultee also stated that this would likely be limited in scale (much of the work undertaken by the community group would be using volunteers). Under some models, where community groups have the right to sell the timber from the woodland they are managing, the revenue from timber sales would also be retained within the local community rather than going to NRW. There are therefore potential distributional considerations, with financial benefits from the sale of timber being directed towards the local organisation rather than returned to wider public funds. Although it is noted, revenue may be reinvested to support management of the asset or directly support the local community.

Costs and Risks

3.6 Some of the consultees highlighted the following potential costs of the transfer of woodland assets:

- **Reduced ‘productivity’ of the asset** – in areas of prime forest, the current management style will tend to be designed to maximise the timber yield of the

forest asset, and minimise the costs associated with extraction, planting and management (noting however that NRW will be balancing many factors in deciding on management style). Moving to an alternative management style, such as continuous cover forestry (LISS management), will likely result in lower yields, at least in the short-term. A CWG consultee, however, stated that in the long-term, this is not expected to be the case – indeed the opposite may be true. Nevertheless, one consultee argued that a shift to LISS could result in reduced revenue from timber sales and also, as a knock-on cost, less timber being available for use, resulting in potential substitution to alternative, possibly more carbon intensive, options, or increased imports from outside of Wales. The scale of such impacts would, however, depend on the scale of the asset transfer as well as productivity differentials. For example, some consultees stated that the assets of greatest interest to community groups are those on the boundaries of communities, which are not generally high-yield timber assets (such as smaller pockets of woodland, sometimes on steep slopes) and may not currently be under active management. This would reduce the potential cost in terms of reduced financial profits (and indeed with the possibility for this to be reversed, in the cases where community groups bring unmanaged woodland into more active management).

- **Increased costs associated with timber production** – a continuous cover management approach, should this be adopted, requires manual extraction of trees. One interviewee identified that this tends to be more costly per unit of timber than clear fell. It is important to note that NRW could benefit from economies of scale which are unlikely to be achieved by community management. This is understood to include benefits in terms of potential unit costs and bulk sale opportunities. There would also be a benefit in terms of management gains due to NRW's expertise.
- **Risk that the asset is not maintained** – maintenance of woodland involves ensuring the continual upkeep of boundaries, paths, managing potential safety hazards and so on. As part of the current model, NRW takes on these responsibilities. If the asset were transferred to a community group, depending on the management agreement or terms of the transfer, the responsibility for this maintenance work may be also be transferred. Some consultees raised that a

potential concern is that community groups may not have the expertise, motivation, appetite or financial resources needed to continue this maintenance in the long-term, leading to risks around the eventual degradation of the asset, and potential for substantial remediation costs which the community group may not have the means to pay. An additional consideration is that in addition to remediation costs, such degradation would be expected to have impacts on the extent of benefits generated over time.

- **Health and safety risks** – The management of woodland involves significant expertise, and dangerous activities such as tree felling must be undertaken with appropriate safety measures in place. Some consultees raised that a potential concern around transferring stewardship roles away from forestry professionals is the potential for additional health and safety risks.

4. Findings: Evidence Review

Background and Context

4.1 Through our literature searches and ‘call to evidence’ we identified a total of 36 studies that met our inclusion criteria from over 400 studies returned through our online searches, manual searching and call for evidence. These core studies have formed the basis of our evidence review.

4.2 Whilst our search strategy and ‘call to evidence’ was designed to capture a wide range of relevant academic and grey literature, we note that due to scope and resources this evidence review is not exhaustive.

Summary of insights from the evidence review

4.3 Broadly, the literature identified and reviewed suggests there are a wide range of *potential* social, environmental, and economic impacts (and risks) from the transfer of timber assets to third parties, and specifically community forestry groups and social enterprises.¹⁵ These are summarised in Table 4-1. Table 4-1 also provides a qualitative assessment of the evidence quality. We categorise impacts as being supported by:

- Limited evidence: Evidence is contradictory, there is a lack of formal evaluative studies, or impacts are not widely reported within the literature;
- Moderate evidence: Impacts are widely reported within the literature and have been identified by at least one programme evaluation, however, reported impacts are presented as outputs rather than outcomes; and
- Strong evidence: Impacts are widely reported within the literature and have been identified by several evaluative studies. Impacts may be presented as outputs, but a wider body of literature supports potential outcomes.

4.4 In line with earlier reviews (for example, Lawrence and Ambrose-Oji, 2014), however, we find that there is a consistent lack of robust empirical evidence in

¹⁵ A social enterprise is defined by HM Government as, ‘a business with primarily social objectives whose surpluses are principally reinvested for that purpose in the business or in the community, rather than being driven by the need to maximise profit for shareholders and owners.’ See [A Guide to Legal Forms for Social Enterprise - GOV.UK](#). In contrast, community woodland groups tend to fund their activities through fundraising and donations.

relation to the *realised* impact of asset transfer on communities and wider society. There are several reasons for this, and these are described in more detail in more detail below:

- The absence of (or lack of a consistent approach to) impact measurement (Lawrence and Ambrose-Oji, 2014; Stewart, 2011). This is due to evaluations focussing on the requirements of funders of the intervention and their broader objectives and the low priority of robust evaluations by often underfunded and under resourced community groups (Lawrence and Ambrose-Oji, 2014; Wong, 2017);
- Where evaluations have been undertaken, the tendency is to focus on inputs, activities, and outputs – a quantitative summary of an activity (for example, trees planted, volunteer hours, membership number of a community group) rather than outcomes – the change that occurs as a result of an activity (for example, improvements to biodiversity, improved wellbeing of volunteers or reduced social isolation due to community membership).
- The difficulty in understanding additionality (what has changed as a result of the intervention, that wouldn't have happened otherwise), attribution (the extent to which the change can be attributed to the intervention) and duration of impacts (the extent to which impacts last over time) in relation to asset transfer. This is primarily due to the lack of baseline and longitudinal data (Ambrose-Oji et al, 2012). It is important to note, however, this has proved to be less problematic for projects where woodland expansion is one of the primary objectives. For example, reforestation or afforestation programmes, where baseline data is more readily available and additionality more evident.
- A high degree of heterogeneity between studies, projects and programmes. Benefits, costs, and risks are influenced by factors such as the specific project characteristics and type of transfer arrangement (for example, tenure, location, size, and initial condition of woodland), institutional structure (for example, formal, informal, social enterprise, for-profit enterprise), financial stability (for example, grant funded or self-sufficient), the objectives of the institution (for example, conservation, local employment, education and training) and a wide range of other environmental and socio-economic factors (Bowler et al., 2012;

Lawrence and Ambrose-Oji, 2014; Lawrence et al., 2020). This means there are a considerable number of independent variables at play for any given study, project or programme, and with it the challenge of establishing causality in relation to scale and direction (positive or negative impacts) of the outcome. This heterogeneity has important implications for appraisals – an overly simplistic ‘one size fits all’ approach could result in misleading estimates due to the large variety in project specific inputs and the impact of this on the scale and type of project outcomes.

- 4.5 Whilst appropriate woodland asset transfers to suitable third parties, such as community groups or social enterprises, do have the potential to create a range of environmental, social, and economic benefits, robust evidence that can be generalised is lacking.
- 4.6 We have found very little reported evidence (if any) in relation to assessment of potential direct or indirect costs (reported negative impacts) associated with woodland asset transfer. This positive bias relates to the limited number of formal evaluations, and due to the nature of reporting that tends to align with objectives of institutions funding the work or project. Risks (defined here as *uncertainty that an outcome will differ from that which is expected*), however, are better represented within the literature. This means when attempting to robustly quantify the potential impacts of asset transfer, the margins of uncertainty will be high with a risk of either under- or over-claiming the potential impacts. This implies a need for appraisal to give adequate attention to understanding and considering case-specific issues and risks.
- 4.7 In the following sections we summarise the findings from our evidence review adopting the categories presented within Lawrence and Ambrose-Oji (2014) which include: biophysical, economic, and financial, social, and participatory.

Biophysical

- 4.8 Whilst there are a multitude of potential biophysical (environmental) benefits identified within the literature, the evidence that the transfer of woodland assets to community groups actually deliver these benefits is limited to date. Evaluations have struggled to capture the additionality of impacts of changing ownership due to

the lack of both a baseline and longitudinal data (for example, Ambrose-Oji et al., 2012). Whilst community woodland groups *carry out* activities that *could* have wide ranging biophysical impacts, no formal evaluations have identified whether these impacts were realised or persisted.

- 4.9 For example, the literature implies that CWGs that take over management of woodlands often have explicit objectives related to practicing Low Impact Silviculture Systems (LISS), increasing the genetic diversity of woodlands by planting indigenous species or habitat enhancement and regulating pests and diseases through planting choices and control activities (Dunn et al., 2021; Wong, 2017; Owen et al., 2008). And, whilst these practices have the potential to enhance carbon sequestration and storage (Krug, 2019), woodland biodiversity and resilience (Dunn et al., 2021; Ray et al., 2018), we have not identified a formal study or evaluation that confirms these benefits have been realised CWGs, and to what extent. Indirect measures, such as improved perception of environmental and woodland quality have, however, been associated with community woodland activities (Owen et al., 2008; Lawrence and Amrbose-Oji, 2014; Wong, 2017; Dunn et al., 2021).
- 4.10 CWGs can and do play a role in woodland management, particularly for smaller, less productive, or undermanaged woodlands. Community groups often utilise volunteers to undertake these management activities, thus resulting in a lower financial cost than if paid labour were used. The extent of this, however, will vary depending on the type of approach adopted (such as continuous cover forestry or coppicing), the skills, resources, intermediary support, and knowledge networks available and the initial condition of the woodland (Dunn et al., 2021; Wong et al. 2015). It is also noted that the opportunity cost of non-paid labour inputs and intermediary support also needs to be taken into account, as well as the fact that community managed woodland is likely delivering a different level of asset productivity – and therefore management costs are not directly comparable.
- 4.11 Where woodland expansion has been the primary objective of community woodland groups, there is stronger evidence in terms of carbon sequestration from planting trees, enhanced biodiversity, woodland quality, and perceived benefits in relation to improved soil management, better water management and reduced flood risk

(Ambrose-Oji et al., 2012). There was, however, no evidence identified that considered how these activities undertaken by CWGs would generate net benefits that were additional to woodland expansion undertaken by, for example, public bodies.

Economic and financial

- 4.12 There is conflicting evidence in relation to the impact of woodland asset transfer on local employment and sustainability of the employment. Broadly, however, the evidence suggests the impacts are likely small. Notwithstanding difficulties of understanding the degree to which employment creation is additional and to what extent displacement¹⁶ occurs, employment creation is dependent on the size, scope, and institutional arrangement of the community woodland group, intermediary support (Lawrence et al., 2020), and revenue generating potential. Social enterprises are more likely to create local employment that is sustainable compared to community woodland groups, by moving away from grant funding to more sustainable forms of income generation, although this depends on financial revenues and/or other funds. Smaller community woodland groups tend to be supported by volunteers, drawing on grant funding or donations to support part-time paid positions. An important consideration here is that no reports of employment creation consider additionality, for example, to what extent there are any offsetting effects on current asset owner employment.
- 4.13 Some community woodland groups do generate income through the sale of goods and services. According to Lawrence and Ambrose-Oji (2014) at least one third of community groups who own, or lease land generate income from some form of trading. Although the types of products are varied and context specific (Siegener et al. 2021) and are dependent on whether community groups have the right to products of the land. Activities may include the sale of timber, firewood, NTFP (Non-Timber Forestry Products), social services, contracted woodland management, training, rental of premises, community renewable energy schemes (Lawrence and Ambrose-Oji, 2014; Wong, 2017; Ludvig et al., 2018; Dunn et al., 2021). Wong

¹⁶ The Green Book (2022) defines displacement as '... the extent to which an increase in economic activity or other desired outcome is offset by reductions in economic activity or other desired outcome in the area under consideration or in areas close by. For example, where a supported business takes market share from an unsupported business.' See The Green Book (2022) - [GOV.UK](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/106222/gb2022-01.pdf)

(2017) highlights that commercial income from rental agreements with third party woodland activity providers (for example, forest schools or cultural events) is particularly attractive as it is relatively low risk and does not require significant staffing.

- 4.14 It is common that the income generated by CWGs is modest, however, it can play a critical role in sustaining a CWG, allowing reinvestment into other services and activities (Dunn et al.,2021). Again, the extent to which asset transfer will lead to revenue generating activities depends on the overall objectives of the community woodland group or enterprise, terms of tenure or management agreement, capabilities and resources to produce such goods and services, and the demand for them. Furthermore, whilst not reported within the literature, the extent to which revenue generating activities are additional or offset those generated by the incumbent asset owner need to be considered.
- 4.15 Asset transfer may offer a foundation for the development of social enterprise (Stewart, 2011), allowing communities to own or manage assets in a way that generates profits, whilst also facilitating income generation (i.e., moving away from grant dependency). Studies in Austria and Scotland have suggested that woodland social enterprises may have some potential to contribute towards some counteraction of emigration from rural areas and increase attractiveness of regions (Weiss et al.,2017; Barlagne, 2021). Although it is important to highlight that these effects are likely to be minor compared to other factors influencing population flows.
- 4.16 Success is often dependent on the degree to which CWGs or social enterprises can attract capital investment, markets to sell timber or NTFP and market access, and the support of sector specific intermediaries (Wong, 2017; Wong et al., 2015). Lease length is also an important factor in determining whether woodland social enterprises are able to borrow money against the woodland asset for further investment into business development (Stewart, 2011).
- 4.17 CWGs have the potential to generate high-quality nature-based tourism (Sarkki et al.,2019), although the evidence is limited within the literature reviewed. Owen et al. (2008) does, however, report anecdotal evidence of increased visitors to community woodlands and suggested that this focus on woodland use might offer some potential positive impact on the local economy. This is, however, dependent on a

range of factors such as displacement of expenditure and scale of expenditure. Such activities could, however, also be undertaken by other public or private woodland owners.

- 4.18 There is no direct evidence relating to sale of smaller lots of timber or sale of timber below market value. However, some community groups or local suppliers want to use local timber supplies for timber products, motivated by local and sustainability interests such as transport-related CO₂ emissions and reducing non-Welsh imports.¹⁷

Social

- 4.19 There is a wide body of evidence implying that woodland transfer arrangements can lead to a range of social benefits. Evidence tends to be in the form of users' perceptions of social benefits or outputs (such as participation in events). Additionally, some reported benefits included reduction in anti-social behaviour around the woodland (for example, vandalism, fly tipping) although there is limited evidence and these are only identified within one study (Owen et al., 2007). Different benefits will, however, be distributed across different population groups. For example, reductions in anti-social behaviour are likely to be most impactful to residents in close proximity to the woodland. In contrast, both the proximate community and non-local users may benefit from improved access and woodland quality.
- 4.20 There is a strong evidence base for the health-related benefits (physical and mental health outcomes) of increasing public access to woodland specifically and greenspaces more broadly (for example, Ridgley et al., 2020; Christie et al., 2017). Nguyen et al. (2021) found that perceptions of green space quality can predict health benefits and health benefits were more consistent in populations with more tree canopy, but not more grassland. However, to what extent access (and use) is increased through asset transfer to CWGs is dependent on the site location (e.g. close to a residential area), whether this is an explicit objective of the CWG and the initial condition and infrastructure available at the time of transfer.

¹⁷ Expert view from personal communication with Dr Jenny Wong, 19th April 2022.

- 4.21 The benefits of increased access (for example, improved infrastructure and access points) and perceptions of improved quality of woodland (including increases in amenity value, sense of place, improvements in quality of life for the community) are well-evidenced with the literature in relation to community woodland ownership (Dunn et al., 2021, Logan et al., 2021). The scale and extent of these benefits will be affected by proximity to residential areas, larger populations and socio-economic profile of an area.
- 4.22 Several studies reported that woodlands received most use when users could walk there (for example, Tzoulas et al., 2010; Greenspace Scotland et al., 2017). Additionally, extensive research has shown that health inequalities can be halved in low-income areas with greater access to green space (Marmot et al., 2010). Whilst proximity is an important factor, use or 'exposure', is associated with woodland quality, programming of events and perceptions of safety (Logan et al, 2021; Ngom et al., 2016; Thompson et al., 2007). It is noted, however there is an evidence gap regarding how accessibility and exposure may vary spatially across urban-rural gradients, including assessment of different natural space types, and how they relate to each other (Jarvis et al., 2020). Although benefits related to increased access and use of woodlands can be realised through the transfer of ownership to CWG, the extent to which these benefits are additional and can be attributable to the transfer has not been explored. Such benefits may also be realised through non-community group ownership should such organisations also have an objective to increase access and use of the woodland.
- 4.23 The delivery of education (work experience, curriculum enhancement), skills and training impacts are widely reported within the literature (Dunn et al., 2021; Siegner et al., 2021; Ludvig et al., 2018; Egunyru et al., 2016; Blundel and Lyon, 2015; Lawrence and Ambrose-Oji, 2014; Owen et al., 2008). But all of these will be dependent on the objectives of community woodland groups and the activities that they undertake. Various surveys identify that education, training and skills tend to be high priorities of most community woodland groups, with Wong (2017) identifying an increasing trend towards social engagement and activities related to local issues. However, there are limited formal evaluations of such education and training aspects in this context to understand consistency and scale of such benefits.

Participation in community woodland groups and woodland activities

4.24 There are a wide range of asserted benefits of woodland asset transfer on participation, both in terms of participation within a CWG or woodland activities organised by the CWG. Whilst the evidence is less developed compared to literature with a focus on community forestry in developing countries, participatory impacts have been considered within the literature. Lawrence and Ambrose-Oji (2014) note, however, that evaluations have focussed on less empowered forms of participation, such as volunteering, membership of community woodland groups or participation in woodland activities compared to leasing or ownership transfer of woodland.

4.25 Ambrose-Oji (2011) highlights that the level of participation will be dependent on the opportunities for people to engage with woodland (see Figure). In particular community woodland shows a wide spectrum of opportunities to participate. As such, the scale and extent of benefits to individuals and communities will be dependent on factors such as the type of activities, institutional arrangements, and tenure.

Figure 4-1: Opportunities for public engagement in forestry

	Inform	Consult	Involve			Partnership (Collaborate)	Empower (Control)	
			Taking part (e.g. events)	Helping plan	Helping manage		Lease	Ownership
Forest management plan	←→							
Health improvement activities e.g. health walks			←→					
Learning activities e.g. Forest School			←→					
Volunteering			←→					
Community woodland			←→					
Community-based business						←→		

Adapted from Forestry Commission Scotland website.

Source: Ambrose-Oji (2011)

4.26 A detailed evaluation of 24 projects within the Cydcoed programme in Wales identified a number of self-reported benefits by beneficiaries of the programme including wellbeing improvements through involvement in the programme, increased trust in the community and increased social networks, improved

community ties in addition to volunteering opportunities and participation in events (Owen et al., 2008). Similarly in a more recent evaluation of community woodland groups in Wales, Wong (2017) found a range of self-reported benefits related to increased participation such as volunteering and community cohesion. However, due to limited longitudinal data relating to participation over time, there is limited evidence on the sustainability of reported outcomes.

- 4.27 More broadly, the literature highlights the potential impact of woodland asset transfer on *community empowerment* (devolution of power to meet local needs, emergence of an effective mechanism in decision-making); *community capacity* (the ability of a community to adapt to economic, social, political, environmental change to ensure community members maintain or enhance their quality of life); *social inclusion* and *social capital* (relationships and networks between individuals and institutions and the characteristics of these relationships) (Stewart, 2011).
- 4.28 Whilst evaluations have confirmed self-reported improvements in social capital, the extent to which community empowerment and increased community capacity has been achieved and for whom (for example, those directly involved or actively engaged in the project or the wider community) is less evident. Whilst Lawrence and Ambrose-Oji (2014) do find evidence of community empowerment and capacity, the rural communities surveyed felt that strong governance already existed within their communities. However, other studies do report community empowerment and cohesion as benefits achieved through involvement in community woodland projects (Tidey and Pollard, 2010; Sarkki et al., 2019).
- 4.29 Lawrence and Ambrose-Oji (2014) highlight that participation in woodland governance can be unrepresentative of the communities within which they reside, for example, committee members tend to be skewed toward older population, and often white and male (Edwards et al., 2009). This is also reflected in the international literature (McDermott, 2009). However, underrepresented groups (for example, low-income groups, ethnic minorities, or those with disabilities) are more likely to participate in events and increase use of a woodland asset above participation within a community group (Lawrence and Ambrose-Oji, 2014).

The broader Community Asset Transfer Literature

- 4.30 To an extent, the social, economic, and financial, and participatory impacts and risks related to the transfer of woodland assets to third parties (particularly the third sector) can be considered similar to those reported within the broader community asset transfer (CAT) literature (assets owned by community public bodies that are transferred into community ownership) with the exception of:
- *Biophysical impacts* (biodiversity, woodland resilience, carbon sequestration);
 - *Nature-based social impacts* (recreation, improved access to green-space).
 - *Woodland-based education, training, and skills* (forestry management training, apprenticeships, work experience and curriculum enhancement).
- 4.31 In 2021, the Welsh Government conducted an evidence review in relation to community asset transfer within the Town and Community Council sector and examined the experiences of Local Authorities and other public sector bodies in Wales in relation to CAT (Welsh Government, 2021). The report outlines some of the benefits, costs and risks associated with CAT to the transferor (public sector body) and transferee (third sector organisation) and wider community.
- 4.32 In relation to the transferor:
- Reduction in costs such as management and maintenance costs.
 - Loss of ability for strategic planning;
 - Potential loss of future financial capital in terms of income and the asset if there is full transfer (as opposed to a lease).
- 4.33 In relation to the transferee:
- Transfer of ownership can support community organisations to develop an asset base which provides opportunities for growth and stability;
 - Individual and collective benefits of volunteering;
 - Strengthen relationships between the community group (transferee) and the local authority (transferor) after completing the CAT.
 - Assets can become financial liabilities (for example, due to mismanagement or lack of resources to meet agreed objectives). Alternatively, assets may already be liabilities before transfer leading to financial difficulties for the transferee.

4.34 In relation to the community:

- The asset remains open, and may become more responsive to local needs;
- Deriving income may lead to the asset better serving the community and engagement of a wider range of community users;
- Delegation of decision making to community levels allows communities to drive their own objectives which can be a catalyst of community regeneration, including potential growth of the community business sector;
- Community empowerment, increasing confidence, sense of ownership and emotional attachment with concomitant impacts on individual and collective wellbeing;
- Risks in relation to representativeness of community group actors and inclusivity in terms of benefit generation.

4.35 Whilst a broader review of the CAT literature is beyond the scope of this evidence review, we highlight these links with prior Welsh Government evidence review research as an example of the potential transferability of insights from this wider body of literature. This has the potential to add weight to existing evidence base of woodland asset transfer to community groups. Although the literature does not provide insights on the biophysical, nature-based social impacts and woodland education which is specific to nature and woodland assets.

Risks

4.36 Risks of woodland community asset transfer are better represented within the literature than costs, and these are outlined below.

Financial sustainability of community woodland groups

4.37 The most common risk identified within the literature was in relation to the financial sustainability of community woodland groups, increasingly caught in a cycle of grant applications that are subject to the vagaries of funders evolving objectives (Wong, 2017; Dunn et al., 2021). In particular, the recent demise in funding for woodland management has placed considerable pressure on existing community woodland groups in Wales. Repeated failure to win grant applications has led to a drop in morale amongst some groups and the scaling down of work or undertaking fewer demanding activities (Wong, 2017).

4.38 Social enterprises are a business model that is emerging in response to the challenges of financial sustainability. Whilst this approach is often encouraged by funders of CWGs, they may be led by people without the business acumen or experience at inception or through membership turnover, so the potential may be overestimated or not fully exploited (Wong, 2017). This has further implications for the longer-term viability of projects, with further risks to asset condition and remediation costs to NRW.

Dependency on volunteer time

4.39 The majority of CWGs are dependent on volunteers to deliver their objectives. A recent survey of community woodland groups, however, found that there has been a reduction in the availability of volunteer time and a difficulty in recruiting volunteers. As above, this places a potential limitation on the activities that can be delivered (Wong, 2017), and therefore a potential risk to the prospects of the transferred assets and realised benefits, or additional costs if additional funding is required for paid workers.

Lack of local-level networking

4.40 Management of woodland requires appropriate understanding of woodland management, harvesting practices, sustainability and in the case of growing an enterprise, product development (Lawrence et al., 2020). CWGs often have a strong desire for local-level networking to enable practical problem solving, shared learning and access to equipment and services all of which support the organisations' ability to deliver ecosystem services. Networking and sharing of support between CWGs, however, has been found to be lacking (Dunn et al., 2021), potentially limiting the quality and extent of potential outcomes.

Conflicting priorities

4.41 CWGs rarely prioritise productivity of a woodland, and it may be difficult to reconcile local community interests with broader growth and production targets of NRW in relation to timber production (Siegener et al., 2021).

Risk of overuse

- 4.42 Dunn et al. (2021) reports, enabling and promoting access to woodlands can lead to overuse, resulting in damage and disturbance to the detriment of other ecosystem services.

Distributional risks

- 4.43 Lawrence and Ambrose-Oji (2014) and Duncan et al., (2013) highlight potential distributional impacts resulting from improvements to urban and peri-urban woodland and greenspace which can potentially increase the cost of housing in the surrounding areas. However, evidence is limited and needs to be put into context of the scale of such amenity effects. Further amenity improvements are a benefit to existing residents/ homeowners.

Durational risks

- 4.44 The Scottish Government states there are there are, '*...distinct economic, social and psychological differences between owning and leasing or managing an asset. One of the key benefits of ownership is the higher level of security and control it offers, in term contributing to building community resilience.*' (Scottish Government, 2015). Blake (2019), however, argues there is evidence to suggest that the same benefits can be realised via other ownership models as long as tenure is long-term (for example, 100 years). The lack of longitudinal data to understand the durability of community woodland groups (for example, governance, membership, resourcing), their impacts and how these might evolve over time means there is a considerable durational risk, particularly for long-term asset-transfer arrangements.

Table 4-1: Summary of Evidence Review¹⁸

Note: + indicates a positive impact, - indicates a risk/cost

Potential Outcome	Description	Evidence quality
Biophysical		
Adoption of LISS and innovative silviculture practices	+ Community Woodland Groups (CWG) management can reduce the cost of woodland management in smaller, less productive or undermanaged areas and utilise innovative silviculture techniques such as Low Impact Silviculture Systems (LISS) - Priorities may conflict with those of NRW. - CWG may lack the skills, knowledge, and resources leading to potential remediation costs impacts on the extent of benefits generated over time.	Limited
Woodland conservation, and improvement	+ Reducing un(der) managed woodlands can increase woodland quality, increase the amenity value, and encourage use, with improved public perception of the woodlands/ local environment. - CWG and Woodland Social Enterprises (WSE) may lack the skills, knowledge, and resources to practice LISS. - Overuse by visitors can undermine conservation activities. - Improvements to woodlands, particularly within urban and peri-urban settings can increase the value (and price) of housing, with potential distributional impacts.	Moderate
Increased biodiversity	+ Improvements to genetic diversity (e.g., planting of indigenous species), habitat enhancement and creation, LISS, but depends on CWG priorities rather than necessarily attributable to woodland asset transfer. - CWG may lack the skills, knowledge, and resources leading to potential remediation costs impacts on the extent of benefits generated over time.	Limited
Woodland resilience	+ Improvements to genetic diversity, regulating pests and diseases through planting and control activities, ecological monitoring, and reporting, but depends on CWG priorities rather than necessarily attributable to woodland asset transfer. - CWG may lack the skills, knowledge, and resources leading to potential remediation costs impacts on the extent of benefits generated over time.	
Carbon storage and sequestration	+ Woodland expansion (if well managed), shifting from clear-fell to LISS. - Some evidence to suggest that increased management of undermanaged woodland may reduce carbon sequestration potential through soil disturbance or increased harvesting.	Carbon storage and sequestration
Economic & financial		
Local employment	+ Local employment creation/ safeguarding employment.	Limited

¹⁸ A more detailed summary of the evidence review is presented in Appendix E.

	- There may be offsetting effects on current asset owner employment.	
Enterprise growth	+ Sale of a range of goods and services (timber, firewood, NTFP, social services, contracted woodland management, training, rental of premises, community renewable energy schemes) can facilitate wealth generation and move away from grant dependency. + Enterprise growth has the potential to increase local prosperity, with some European studies identifying this also has the potential to counter emigration from rural areas, increasing attractiveness of regions. - Difficulties of generating income due to the need for capital investment, competition, markets and access to markets, highlighting the benefits associated with selling at scale. - There may be offsetting effects on current asset owner.	Moderate
Tourism	+ Activities of CWGs could lead to an increase in visitors to the woodlands they manage, however, this is rarely evidenced. + An increase in visitors may lead to positive impacts on the local economy. - Overuse by visitors can undermine conservation activities.	Limited
Social		
Environmental education	+ Increased understanding of local environment and nature; increased attendance to events with educational and learning theme	Moderate
Training in forest management	+ Local people trained to practice alternatives to larger scale/commercial forest management.	
Recreation	+ Increase in recreational use (e.g., physical exercise, informal play). + Leasing of premises to third parties can increase recreational facilities within woodland, and support revenue generation of community woodland group.	
Access	+ Creation of infrastructure (paths/tracks); increase in access points and maintenance of infrastructure, although dependent on CWG aims. - Often high cost of maintenance to community woodland groups. - Overuse by visitors can undermine conservation activities.	
Education and training	- Curriculum enhancement activities; work-related skills training (apprenticeships, work experience)	
Community quality of life	+ Improvements in quality of life for the community; reduction in anti-social behaviour around woodlands; sense of place.	
Individual health and wellbeing	+ Increased recreational use of woodlands (e.g., physical exercise, informal play), but depends on proximity of woodland to residential areas as use leads to benefits realisation. - Overuse by visitors can undermine conservation activities.	Strong
Participatory		
Social inclusion	+ CWG and WSE can potentially deliver local services at lower costs as they may not need generate a profit. + Employment opportunities (training, work experience, local employment).	Limited

	<ul style="list-style-type: none"> + Increased access by people from deprived areas. + Economic development by creating more enterprising communities and attracting new people to business. - There may be offsetting effects on current asset owner, and related employment. - Evidence that improved amenity value can have a negative impact on social inclusion by increasing the cost of housing. - Unrepresentative group members may not prioritise local needs. 	
Community empowerment	+ Devolution of power to meet local needs, or effective mechanism for involving citizens in decision making.	Limited
Community capacity	+ The ability of a community to adapt to economic, social, political, environmental change both in terms of threats and opportunities to ensure community members maintain or enhance their quality of life.	Moderate
Social capital	+ Social capital can be strengthened by encouraging community ownership and management of assets.	Moderate
Volunteering	<ul style="list-style-type: none"> + Increased opportunities for volunteering. - Many CWG report difficulties in sustaining and recruiting volunteers requiring either a shift in business model or a focus on activities that require lower numbers of volunteers. 	Strong

5. Findings: Stakeholder Consultations

5.1 The following Chapter provides a synthesis of nine consultations with Welsh community woodland groups, NRW place-based teams, and Forestry and Land Scotland. The purpose of these consultations was to:

- Understand how the different asset transfer arrangements might enable different additional benefits, risks and costs depending on scheme purpose;
- Explore who the range of direct and indirect beneficiaries might be as a result of woodland asset transfers to community groups/third sector;
- Understand what the range and scale (and durability) of additional benefits are considered to be for each beneficiary type identified by stakeholders, where feasible;
- Understand how each potential benefit could be measured and the extent to which they are additional and attributable to the transfer;
- Understand whether and, if so, how community groups/third sector assess their costs and risks of entering into an asset transfer arrangement; and
- Consider potential challenges to NRW being able to appropriately quantify and/or robustly and proportionately assess benefits, costs and risks using suitable approaches and methods.

The perceived role of NRW

The main types of arrangement that NRW have with CWGs

5.2 According to Llais y Goedwig, who represent and support community groups and practitioners across Wales, there are around 300 grassroots members across all Welsh woodland. Within the assets managed by NRW, there are approximately 34 CWGs who have an existing management agreement on NRW land. Some CWGs started on short-term agreements of 5-years, but NRW is considering moving towards longer 25-year agreements. The reasons for this include:

- To reflect NRW's Area Statement planning cycle, which is in part designed around the life cycle of a soft species tree. This provides a more coordinated

and joined up approach allowing CWG to contribute to the longer-term plan for each Area Statement.¹⁹

- To support CWG's grant applications, where most Funding Bodies require 5+ years remaining on the agreement.

5.3 At the time of writing, NRW offer two permission types. These include;

- **Land and Property Consultation:** This occurs when an 'asset' (for example, a cabin) is involved. This required the involvement of a range of NRW teams including legal, and commercial.
- **Permissions Process:** These are submitted to a regional NRW lead directly. These can include a management arrangement, but more typically permission requests tend to be for one-off events in the woodland. Permission requests for on-off events have not been considered further as the scope of this report is focussed on longer, and more formal management arrangements.

5.4 Regarding the arrangement types identified, only one CWG have a Land and Property Consultation (lease arrangement) due to an existing structure on the land in question. All other CWGs have a management arrangement that falls under the Permissions Process.

5.5 In terms of future categorising of arrangement types, Llais y Goedwig are currently delivering a contract with NRW to research and interview all 34 CWG to better categorise their arrangement type – in turn to ensure each Permissions Process is reflective of each category scope. Initial direction for new CWG categorising could include:

- Footpaths and litter picking (low risk);
- Community Woodland Groups;
- Mountain bike trails; and
- Social Enterprises, Cooperatives and micro businesses

¹⁹ An 'Area Statement': Seven area statements across Wales, set out the priorities for 'place'. E.g., Climate Emergency, Reconnecting people with nature, Sustainable economy, Sustainable Land economy. The Area Statements are available on NRW website - for every part of Wales - these then inform the Operational planning e.g., Place Plan.

Benefits NRW teams consider CWG to provide

- 5.6 Given the broad variety of CWG objectives and priorities, and the variety in woodland location and characteristics, no NRW interviewees felt they could correlate specific benefits with different arrangement types; *‘one size does not fit all’*.
- 5.7 Beyond arrangement types, there were clear themes complementing the literature review that were highlighted as benefits that interviewees felt all CWGs create. These are presented in Table 5-1 and have been categorised to the overarching categories- Biophysical, Economic and Financial, Social, and Participatory used throughout the report.

Table 5-1: Summary of benefits identified by CWGs interviewed

Impact category	Description
Biophysical	Contributing to NRW’s Sustainable Management of Natural Resources
Economic and financial	Education, tourism, employment through contractors, training of skills in forestry (sustainability of the industry), job creation through paid positions within some CWG
Social	Recreation, mental & physical health, enjoyment of the outdoors, school and young person engagement, education of the forest and caring for the living planet
Participatory	Increasing capacity of community to sustain the group’s priorities, increasing sense of ownership (Area Statement goal)

Source: Steer-ED

- 5.8 All NRW interviewees felt enabling CWGs to thrive was not just the right thing to do to contribute to flourishing places, but an absolute imperative to achieve NRW strategic aims as an organisation.

How could NRW better support CWG to realise benefits from a transfer arrangement?

- 5.9 NRW already support aspiring CWGs through a contract (until 2024) with Llais y Goedwig. Through this contract, Llais y Goedwig acts as an intermediary, sharing best practice, knowledge, and experience from past projects, to give each emergent CWG the best chance of success at the primary stages of forming a group and taking on a woodland management agreement.

- 5.10 CWGs are required to submit an annual management plan. There is no specific template they have to follow, but they are held to account on their progress against it.
- 5.11 CWGs also share short annual reports which cover Health and Safety, employment and other metrics associated with the activities they provide, for example beneficiaries of training provided by the CWG, Health and Wellbeing initiatives and partnerships with other organisations (e.g., the NHS).
- 5.12 Furthermore, NRW interviewees described that existing quarterly or annual meetings work well for updates on progress and activities of CWGs and could be used as an opportunity to collect metrics in relation to:
- Number of events;
 - Number of participants;
 - Key characteristics of participants (e.g., age); and
 - The activities that CWGs are undertaking.
- 5.13 Interviewees felt that current reporting requirements work well for community groups and monitoring progress. Given the heterogeneity of CWGs, however, interviewees felt if reporting requirements became too rigid and detailed, they would not be appropriate for the broad ranging objectives and activities of each CWG. There was also a concern by CWGs that extensive reporting requirements could stifle innovation.
- 5.14 Interviewees, however, agreed that CWG could be better supported to navigate the process as it currently stands via the following:
- A more inclusive scope of assessment that captures the CWGs wants and needs, in balance with running a commercial forestry operation (for example, foregoing the value of the timber on the land);
 - Recognising woodland as a wider resource beyond timber sales;
 - Case by case monitoring of CWGs and their activities;
 - Regular checking of compliance related documents (for example, chainsaw licences). Mature sites have much less contact, usually through annual reports and annual action plans.

- 5.15 Several interviewees also highlighted that there should be no expectation of 'going above and beyond' their existing plans. Given that all woodland assets currently used by CWGs is not commercially productive woodlands, it is understood that all the activities undertaken by CWG appear to be additional. As such, these could be considered as beneficial to NRW and society more broadly.
- 5.16 Both NRW and CWGs recognised the need for pragmatism and flexibility. Nevertheless, there is a requirement to monitor delivery and assess Value for Money. Furthermore, minimal reporting requirements may only work with current (small) numbers of CWGs. If numbers of CWGs increase significantly, multiple approaches and flexible reporting requirements may be difficult to aggregate or benchmark performance. Further it is likely NRW would require increased resources to manage and monitor CWG management agreements, thus incurring additional costs. As such, a very light touch approach to monitoring and reporting may not be possible going forward.
- The risks and costs that NRW considers when assessing community group/third sector proposals, in relation to each asset transfer arrangement*
- 5.17 Interviewees highlighted that NRW incurs a cost from the resources required to support new and existing CWGs with a management agreement. Currently, the whole organisation is stretched with each division having a broad remit (e.g., Land Management teams). The pressure on time and resources has become more challenging since the COVID-19 pandemic.
- 5.18 The legal fees to establish a woodland agreement cost approximately £1,000 for the CWG. NRW also incurs additional costs in legal fees when compared with no agreement being in place, although the scale of costs vary depending on the type of woodland agreement.
- 5.19 CWGs tend to target woodland assets that are not commercially viable for timber production. The commercial team at NRW set the value of the asset, however, and this will be set at its current market value.
- 5.20 NRW incurs costs to maintain and develop plans. For example, NRW teams will be required to check new woodland infrastructure installed by a CWG such as a new footpath meeting quality and safety standards. Whilst this is a staff time cost for the

Land Manager to travel to and from the site and carry out necessary checks, interviewees expressed this was minimal in the context of NRW's wider expenditure. It is noted that the cost will depend on travel time and the extent of site checks. Furthermore, the NRW Recreation Team may incur additional costs for maintaining or enhancing supporting infrastructure, such as car parks, trails, signage, and communications. However, this may not necessarily relate to maintenance costs of infrastructure installed by CWG, but rather pre-existing infrastructure before the transfer incurred. Maintenance of incumbent infrastructure does not currently fall within CWG management agreements. There are also land agents fees associated with CWG management agreements.

- 5.21 For CWGs [in establishing agreement], there are additional costs which include, liability insurance, first aid training, chainsaw training, the capital expenditure associated with other equipment, the cost of leasing (or purchasing) an office base and volunteer time. There are also costs associated with attending quarterly meetings, attending by community group [and NRW staff].

The risks that NRW teams feel need to be considered when assessing community group/third sector proposals

- 5.22 As identified within the evidence review, there is a common risk to all CWG projects that the project will fail or close due to instability of the organisation structure.

Examples described by interviewees included:

- **Personnel changes:** aging retiree who manages a CWG is unable to continue, or there are personnel changes. This risk could, however, be mitigated by encouraging a broad spectrum of members.
- **CWG unintentionally becomes a 'community interest group'**. CWG have faced challenges in the past when the power dynamic becomes too heavily weighted towards a narrow interest that is not representative or inclusive to the entire community. For example, if a mountain bike trail group does not properly engage with the wider community on its plans for new paths or encourage a wider, less representative part of the community to join. One interviewee suggested a way of mitigating this risk would be for NRW to require the *Future*

*Forest Design Process*²⁰ to be adopted by prospective CWGs. This would ensure the community as a whole has the opportunity to feed into long-term plans from the start.

- **CWGs may breach the conditions of their agreement:** Whilst uncommon, there is a risk CWGs may undertake activities without consulting NRW, for example, felling woodland without agreement. It is important to note that regular (for example, annual) compliance checks by NRW would be an additional and ongoing cost.
- **Funding** is a regular risk to all community/ third sector organisations that do not have a sustainable business model allowing them to be independent of funding. There is always a stretch for money and grant bids, both in terms of the resources required to prepare applications, and the competition for the funding available. Those that are known to fund CWGs include: Lottery Funding, Community Benefits funding offered by delivery partners (for example, Brownfield and Anglesey wind farms offer compensation money, however, these can be seen as controversial in some communities such as farming), Veteran Funding, and National Forest status (this could be NRW estate, or other estates such as Local Authority or private).
- **Personal injury and other compliance risks** do exist, however interviewees highlighted that these were more manageable and predictable for CWGs and their associated activities compared to some of the other activities NRW undertakes. This would, however, depend on the activities undertaken and the training and experience of the individuals performing it. For example, CWGs rarely fell woodland, but in the absence of the right level of expertise, the risk could be considerably higher compared to NRW undertaking the same task.

Community groups

The main types of arrangement that CWGs have with NRW

- 5.23 Aside from one of the CWGs interviewed who do not currently have a management arrangement with NRW, two interviewees described having a management agreement between 5-21 years, with varying arrangement types during those

²⁰ Welcome to our Woods co-design process. <https://futureforestvision.co.uk/people-and-process-2/>

periods. A third CWG had a lease agreement with NRW. This was due to a structure on site. There may also be subtle conditions that vary from agreement to agreement, such as:

- Prohibiting any commercial activity on the woodland site, including the felling and sale of timber. One interviewee explained they sometimes fell trees within permission from NRW, however, they are prohibited from selling the timber.
- Conditions for maintaining a building or grass on the edge of a car park;
- Explicit conditions that the lease does not include the timber stock (e.g., an access agreement without felling rights); and
- Not using machinery in the woodland.

The main purpose (objective) each group is seeking to achieve (i.e., which of the Well-being Goals and social value outcomes community groups most prioritise)

5.24 Just like NRW stakeholders voiced, the CWG objectives alongside their woodland location and characteristics, will influence the specific benefits they are able to deliver; *'one size does not fit all'*. There were four connected but subtly different objectives for each group. These are summarised in Table 5-2.

Table 5-2: Summary of Welsh CWG objectives

Group 1	<ul style="list-style-type: none"> • Health and Wellbeing– - including addressing inequalities in access to good quality green spaces, supporting mental health and physical inactivity initiatives; • Skills and Jobs – addressing low skills, low wages and few employment opportunities in the areas. Much of the existing employment is minimum wage, part-time or seasonal. Any skills initiative the group deliver seek to combat these systemic issues; • Poverty – tackling lack of access to resources and services, and fuel poverty; • Other objectives of group: Leave woodland in a better condition that it is today so the local community benefit from it.
Group 2	<ul style="list-style-type: none"> • Community management– was a broad overarching theme by design. Community management meant that activities could be responsive to community needs. • Education – was a core purpose, for example a Forest School was part of original motivation for this project. • Community access – to enable access for community use on an ad hoc basis.
Group 3	<ul style="list-style-type: none"> • Community and biodiversity benefit – the core purpose is to manage to woodland for the benefit of the local community and wildlife. Any activity has to do both of these for every initiative e.g., an exercise class and clearing up woodland has dual purpose.
Group 4	<ul style="list-style-type: none"> • Local economic growth and job creation • Management of woodland for sustainable timbe – including raising awareness to promote new woodland planting; • Mental health – using the woodland to enhance individual wellbeing.

The direct beneficiary of CWGs purpose and arrangement type

5.25 All CWG interviewees cited all of the benefits highlighted from the interim report as relevant to their agreement, especially:

- **Employment and skills:** provision of opportunities to learn new skills that support employment (green jobs), CWGs also highlighted they always try and source locally and use local contractors.
- **Education:** Provision of access to Forest Schools (all local schools use their local woodland space). They also work with local schools to provide curriculum enhancement activities (in addition to Forest Schools).

- **Biophysical:** Examples of activities included: experimenting with new exotic species that are climate resilient; public events (e.g., Moth Night) working with local ecologists; butterfly conservation; drawing on local expertise for knowledge sharing activities in relation to the environment by local experts, for example, awareness raising about water pollution.
- **Innovation:** Trialling enterprises such as non-timber woodland products, such as harvesting and selling birch sap (edible syrup). Other enterprises included singing groups, woodland sessions for children from paying local schools. Some of these are led by CWGs themselves, whilst others such as the singing group is privately run and CWG leases out a community space.
- **Social:** Wellbeing groups, volunteer programme, stronger sense of community and belonging
- **Improved access to woodland to increase participation:** new paths, tree planting, community decision making

Other benefits cited beyond the literature review

- 5.26 **Increased community capability and confidence:** One community has set up a shop run by volunteers in a nearby village (turnover £140k). The experience of setting up and running the CWG stemming from a management lease agreement gave the group confidence to develop further projects.
- 5.27 **Capital investment that otherwise would not have happened:** CWGs with management agreements have been able to apply for external grants to enable construction of cabins, paths, and a bird hide. Mostly grants applications are led by volunteer Directors of the CWG. Whilst funding would not have been possible without the NRW management agreement, the funding is external to NRW grant funding, often sourced from charitable foundations or via Community Benefit funds.
- 5.28 **Reduced anti-social behaviour:** One CWG group had a management agreement that allowed the creation of a fire pit to tackle arson. While other factors may have also played a role in the cessation of attacks, there has been no reported arson in 8 consecutive years.
- 5.29 **Taking pressure from the Public Services creates saving for the public purse:** The reduction in arson due to the fire pit intervention identified above has reduce

the costs to the Fire Brigade. One CWG partnered with a local health board to bring patient groups (Woodland Therapy Groups) to the site. The site was provided by the CWG to the local health board for free.

- 5.30 **Community cohesion/ 'hwyl'**²¹: Interviewees felt that their CWG had become an anchor organisation within their locale. Although this is hard to measure it was described as 'hwyl'. It is important to note, however, this is based on views of the CWG rather than the community itself.
- 5.31 **Creating precedents and reducing barriers**: One of the CWGs had gone through an extensive process to move towards a lease agreement with NRW which would give the CWG more ownership and responsibility of the plot in comparison to a management arrangement. The learning and experience from this particular example was viewed as a value in itself to future CWGs who benefit from the path carved out by the CWG.
- 5.32 **An opportunity for communities to innovate**: Interviewees expressed that this is an under-the-radar element of the work they do, that is always considered above and beyond expectations. There was a strong feeling that community issues can be solved through enhanced access to woodlands and the foundations they provide for a multitude of activities and interventions.

The costs each community group faces in relation to their main objectives

- 5.33 **Unexpected costs to rectify damage done on CWG space by the timber industry**: One CWG cited a contractor's machinery destroyed a path installed by the CWG. Although notified of the damage, the contractor did not return to repair the damage done. Interviewees expressed that the timber industry needed to be held accountable to the impact of their presence on CWG plots.
- 5.34 **Commitment to resource the skills within the team**: Whilst CWGs provided the opportunity to gain a range of qualifications such as chainsaw licences, time and resources are required. They also require funds for professional services for, for example, Chartered Forester plans, health and safety checklists, and for tools and machinery.

²¹ a stirring feeling of emotional motivation and energy

- 5.35 **Operational costs:** The main cost is insurance (building and public liability): to the level that NRW need - £400-£500 annually. CWGs also incur operational costs, even if they are completely volunteer run such as utilities (e.g., energy and waste).
- 5.36 **Maintenance costs:** All CWGs tried to do things at low/no cost, but there are barriers put in place that stop this. For example, management agreements prohibit the use of some machinery such as lawn mowers, and NRW require the use of their own contractors.
- 5.37 **Social cost:** Interviewees also expressed that whilst there are many positive benefits from CWG and their activities, managing a CWG can cause stress, particularly in relation to the preparation of proposals for grant funding.

The risks each community group faces in relation to their main objective:

- 5.38 Further to additional benefits and costs that could be associated with CWG management arrangements, CWG were also asked about what risks they currently face that could impede their organisational objectives.
- **Skills:** There are potential health and safety risks, and risks to the quality of the forest if the community lacks the skills to manage the forest properly. This could be mitigated through training and intermediary support, such as that provided by Llais y Goedwig.
 - **Lack of continuity:** As discussed by NRW consultees, CWGs without a sustainable business model and dependent on grant funding will always be at risk that funding programmes may cease or competition for resources increase. As such, there is a risk that activities may stop or be reduced if funding is not available.
 - **Volunteering:** CWGs tend to be reliant on volunteer time. Not only are there challenges with recruitment, but volunteering commitment and retention can change as levels of enthusiasm vary over time.
 - **Maturity of measurement:** There was an awareness and understanding from CWGs that putting monetary figures on the natural world is at the early stages of development as a concept. As such, there is a need to never use any financial proxies out of context and always alongside other quantitative and qualitative assessments.

Views from CWGs on how they could better measure each benefit

- 5.39 Measurement is a standard requirement for all grant funding, such as qualitative feedback from participant surveys and forms. For management agreements with NRW, CWG cited little requirement for specific metrics other than annual report against their annual work plan.
- 5.40 There are a range of monitoring activities undertaken already against the benefits delivered. These include:
- **Grants/Lottery funding** requires reporting against specific indicators, such as number of participants, and bags of rubbish collected. These are supplemented with testimonials and case studies. Some grants require external evaluators to visit onsite and measure against a Theory of Change.
 - CWGs also collect **qualitative data**, for example through surveying beneficiaries in relation to social connectedness and confidence through participation in CWG activities or access to the woodland. Data collection, however, is often tied to funders' requirements.
 - **Compliance** includes requirements such as health and safety and forestry regulator.
 - **Environmental:** CWGs compile a spreadsheet of all species planted to understand changes in biodiversity. CWGs upload these data to local environmental record centres (LERCs) such as Cofnod. It is understood that CWGs tend record species planted, but more detailed site survey data could also be collected by using the LERC Wales app, allowing long-term and more extensive monitoring of changes attributable to CWG activities. LERCs are a first-of-a-kind national network for environmental reporting developed in Wales. Some CWGs interviewed also participate in BioBlitz, a programme run by the National Geographical Society (NGS) is a nationwide 24-hour community nature reporting event which multiple CWGs participate in. While reporting is paper-based; CWGs are increasingly using apps developed by the NGS such as Seek (an image recognition tool that enables identification of fungi, plants and animals) and iNaturalist that is an app developed for recording and sharing observations.

5.41 The main challenges in relation to measuring and monitoring cited by the CWGs was identifying what is meaningful or 'material' to measure and how to do this effectively. Reporting against economic impacts or subjective measurements such as feelings or wellbeing is viewed as challenging, whilst reporting on financial performance or more objective measures such as visitor numbers is more straightforward. Overall, it depends on the aims of each group, the characteristics of their site and the targets and aims they set for the year. Finally, a number of CWG felt that objectives and any measurement should only ever be overarching. In this respect, it allows the CWG a necessary nature of flexibility in order to respond to ever-changing community needs and encourages the delivery of new and innovative initiatives as a result.

5.42 Other barriers to metric measurement included: consistency of measurement between grant funders, standard qualitative feedback limitations (i.e., people might feel different on different days, might submit different result on paper compared to an online survey, being truthful) and a general feeling that metrics that were too rigid were not in the spirit of management arrangement. In other words, allowing a nature of flexibility in order for CWGs to be responsive to community needs.

How each community groups feels they could be better assessed on realising their objectives from the start of their management agreement

5.43 CWGs interviewed highlighted several ways in which they could be better assessed on realising their benefits. These include:

- Financial resources from a public body to pay community groups to deliver specific benefits. If a group wants to receive payment, they will need to prove it with metrics;
- NRW provided no guidance, so there was a lack of consistency across management plans for all groups. As such, more guidance could be provided by NRW; and
- CWGs felt projecting targets against specific Work Plans might be more appropriate.

Summary

- 5.44 All CWGs interviewed were different in scale and location, yet they all had similar aims; to create benefits for their local community. These included:
- Improving biodiversity, health (including supporting Health Board patients) community cohesion and participation, and community capability and confidence;
 - Providing opportunities for education and skills development to increase employability; and
 - Reducing anti-social behaviour and pressure on Public Services.
- 5.45 NRW interviewees felt empowering CWGs and supporting them to thrive contributed to flourishing places and enabled NRW to meet its strategic aims. Similarly, CWGs interviewed viewed their role as enabling NRW to meet their own objectives.
- 5.46 While some costs and risks were highlighted, these costs and risks were seen as small in nature in proportion to the totality of NRW's activity. For example, some interviewees expressed a view that woodland asset transfer to CWGs could reduce the 'productivity' of the woodland. All plots managed by the CWGs engaged in this research, however, were not considered as productive due to their location or size. Allowing CWGs to generate positive outcomes from an unproductive area was therefore seen to be of minimal risk in terms of reduced asset productivity.
- 5.47 Interviewees felt there was a common risk to all CWGs of organisations structure instability of the organisation structure due to personnel turnover or retention of volunteers, this risk could be mitigated by encouraging a broad spectrum of members. Given this, an objective for all CWGs should be to engage the whole community during co-design at inception.
- 5.48 The management plan that CWGs submit to NRW was viewed to be sufficient and appropriate in order for progress between parties to be aligned. However, with no specific template for CWGs to follow, a signposting tool or simple logic model aligned to NRW expectations could help to demystify how CWG can connect their own particular objectives to relevant and proportionate benefits. The logic model can act as the golden thread that ties strategic aims to known positive outcomes.

- 5.49 In terms of measuring progress of activities or measurement against any benefits or impacts, both NRW and CWG interviewees recognised the need for pragmatism and flexibility. CWGs in particular were keen that any monitoring be light touch as not to stifle innovation and the ability to respond to community needs. However, this will need to be balanced against the need to more formally assess impacts. Any future assessment and monitoring of benefits, costs and risks will need to be structured to respond to changes to the number of or nature of arrangements i.e. a greater level of responsibility or ownership is awarded to CWGs through leases.
- 5.50 Finally, there is opportunity for the timber industry to work with CWG, as opposed to working around them or damaging their activity

6. Logic Model

6.1 In this section a benefits logic model is presented with the aim of clearly showing the potential causal channels of woodland asset transfer to CWGs and third parties from inputs to impacts. The logic model combines the findings in Sections three to five to illustrate steps in the causal chain. It maps out how inputs might lead to activities which deliver outputs, and in follow-on steps these lead to outcomes, and impacts. A logic model shows, by omission, which activities or effects are not considered within the causal chain because they are deemed to not be influenced by the intervention. As such, it provides a clear framework for thinking through and focussing assessment efforts and considering necessary monitoring and evaluation considerations. The logic model also provides an indication of the benefits that could be realised, should particular activities be permitted under a transfer arrangement.

Logic Model Development

6.2 The logic model presented in Figure has been developed by analysing NRW's input: transferring the use of assets (i.e., through leasehold arrangements) of woodland to local CWGs. Resulting from this input, the corresponding activities, outputs, outcomes, and impacts have been identified from the research presented in previous sections of this report. It is noted that some activities will require additional inputs, such as labour (e.g., volunteer hours or paid labour) and possibly other financial resources (e.g., grant funding) to generate outputs.

6.3 The solid and dashed lines presented within the logic model shows stronger and weaker links respectively, based on existing evidence. The model identifies the benefits contained in Chapter 7 where benefit quantification and monetisation methodologies are suggested to measure each benefit. A link to the risk logic model is also provided within the Activities column and is described in more detail below.

Risk Logic Model

6.4 In addition to the benefit logic model described above and presented in this section, a simplified risk logic model has been developed which identifies and outlines potential negative implications of the transfer of woodland assets into local

group/community ownership. Table 6-1 presents the risks and costs associated with the transfer of woodland into community ownership and management and has been separated from the logic model to aid readability.

- 6.5 The input is the same as in the benefit logic model, but the activities driving the costs and risks are different which lead to negative impacts. The activities associated with costs and risks have been numbered and where these could happen alongside the activities highlighted in the benefits logic model, this has been shown by assigning these activities this number. For instance, the activity '*NRW support CWGs in accordance with the framework agreement*' in the benefits model has been linked to '*Increase in resources required to support new and existing CWGs who have a management agreement (e.g., support and maintenance)*' within the risk and cost logic table as these activities may happen alongside each other. This helps the reader to view where benefits, costs and risks may need to be considered together for particular activities.

Figure 6-1: Benefits Logic Model

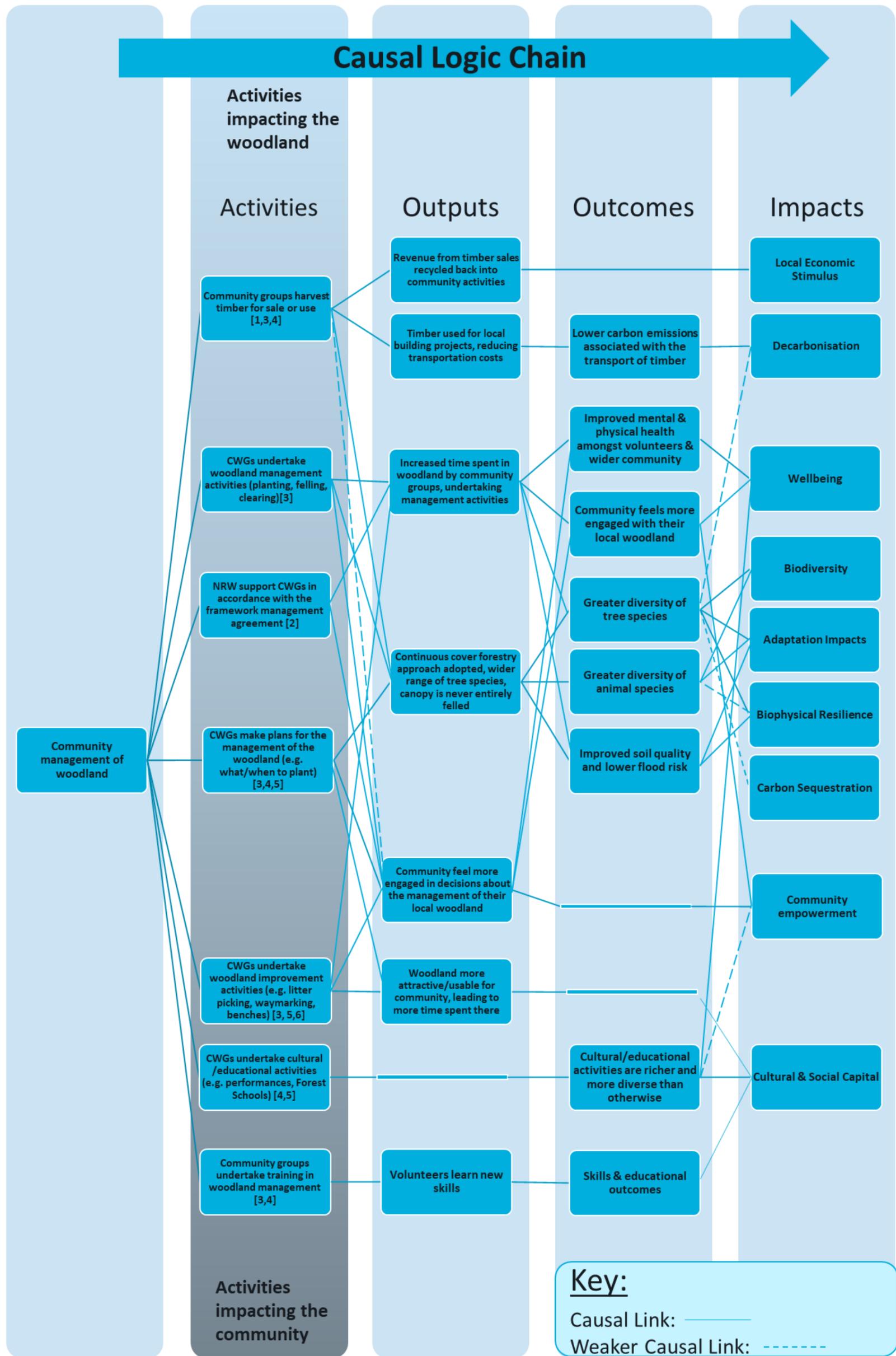


Table 6-1: Risk & Cost Logic Table

Inputs	Activities	Outcomes
Woodland asset transfer to third party organisations (community woodland groups/ social enterprises)	[1] Timber sales at below market prices	<ul style="list-style-type: none"> • NRW do not make revenue from timber sales. • Timber used for lower value purposes, reducing the potential for local economic stimulus.
	[2] Increase in resources required to support new and existing CWGs who have a management agreement (e.g., support and maintenance).	<ul style="list-style-type: none"> • Growth in number of CWGs leads to increased staff time cost to NRW for development, monitoring/ annual compliance checks of CWG with woodland management agreements. • Risk that NRW do not have the resource to enforce/support framework agreements.
	[3] Management of woodland (e.g., lack of skills and knowledge)	<ul style="list-style-type: none"> • Operational costs (e.g., utilities, insurance, professional services) • Maintenance costs (e.g., infrastructure, management) • Opportunity cost of non-paid labour inputs and intermediary support. • Opportunity cost of less productive woodland. • Training costs (e.g., chainsaw licences) • Wellbeing cost (e.g., stress associated with funding applications). • Risk of mismanagement leading to introduction of invasive species, disease, trees deaths, lower carbon sequestration and biodiversity, leading cost to NRW for remedial work. • CWG breaches conditions of their agreement, leading cost to NRW for remedial work.
	[4] Stability of CWG (e.g., 'community interest' group, high churn of CWG members, instability of funding)	<ul style="list-style-type: none"> • Exclusion of individuals & distributional risks as benefits only captured by community subset. • Changes in personnel leads loss of knowledge capital within CWG impacting financial stability, financial resources and reduced ambition and scale of outcomes from CWG activities. • Difficulty in recruiting and retaining volunteers leads to under resourcing and reduces ambition and scale of outcomes from CWG activities. • Instability of CWG funding reduces ambition and scale of outcomes from CWG activities. • Lack of long-term interest/ engagement reduces the benefits • Health & safety risk of inexperienced or unqualified volunteers.
	[5] Access to woodland	<ul style="list-style-type: none"> • Increase access to woodland leads to overuse of leading to degradation and increased cost to NRW or CWG for remedial work or reduce biophysical and 'access' benefits. • Exclusion of individuals & distributional risks as benefits only captured by community subset.
	[6] Damage due to commercial activity adjacent to woodland asset	<ul style="list-style-type: none"> • Additional cost to CWG; • Reduced impact of CWG activities • CWG loses motivation

7. Practical Recommendations for NRW

Introduction

- 7.1 In this Chapter, we present the key output of this study, a ‘signposting’ guide to inform the development of an appraisal framework for proposals which involve the transfer of woodland asset management from NRW to community of third sector organisations in Wales, potentially at below market prices.
- 7.2 This Chapter has been developed by drawing together findings across all study workstreams: initial scoping consultations, a non-exhaustive evidence review and stakeholder consultations with actors from NRW, the community forestry sector, Forestry and Land Scotland and government economists.
- 7.3 Through a collaborative process with the study Steering Group including the Welsh Government and NRW, it was agreed that the most useful format for the final outputs for this work was a signposting guide which broadly sets out how potential impacts can be quantified and, where relevant, monetised and tools and resources to support this – this is discussed in further detail below. This approach aims to support the needs of NRW but also reflects the findings from our evidence reviews and stakeholder consultations. This is because the range of transfer arrangements, associated conditions of transfer, community woodland group characteristics and objectives and their relationship with wider society will mean outcomes, both positive and negative, from such transfers are likely to be project-specific. Due to the high heterogeneity between projects, a uniform set of indicators may therefore not be adequate to appropriately appraise the benefits, costs, and risks of a project.
- 7.4 The signposting guide (presented in Table 7-1) identifies both the strength of evidence for the particular impact and key factors affecting the scale, duration, and extent of the impact. It draws on the potential impacts (benefits, costs, and risks) related to woodland asset transfer to community groups and third parties identified in the evidence review and stakeholder consultations and that may be relevant when appraising a proposed woodland asset transfer. The guidance also highlights approaches for quantifying and where relevant monetising the potential biophysical,

economic, and financial, social and participatory impacts associated with timber and woodland asset transfer to community and/or third sector organisations.

- 7.5 This signposting guide follows similar approaches to guidance such as HM Treasury Green Book, Defra's Enabling a Natural Capital Approach (ENCA) and HM Treasury's Wellbeing Guidance, both supplementary guidance to the Green Book, by identifying robust methods and resources to enable decision-makers (e.g., project sponsors or NRW) to appraise proposals submitted by community or third sector organisations.
- 7.6 The guidance and recommendations presented in this Chapter are also consistent with approaches already adopted by the Welsh Government including HM Treasury Green Book and ENCA.

Quantifying and monetising benefits, costs and risks

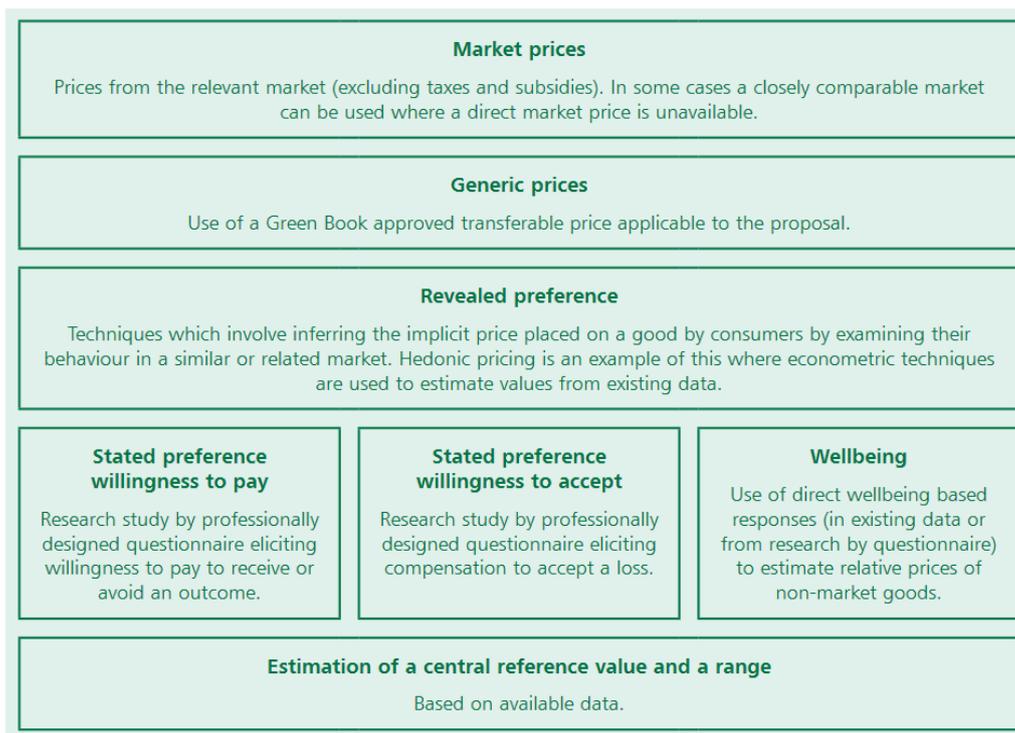
- 7.7 Government best practice states that wherever possible, the anticipated costs and benefits of any use of public funding should be quantified and monetised. This allows the funding department to ascertain the likely value for money of the intervention, and to make decisions between funding a range of alternative programmes, including a business as usual (BAU) or a relevant baseline.²² As such, there has been an increased emphasis in UK Government policy, programme and project appraisal on the monetisation of factors for which there is no appropriate market value.
- 7.8 In addition to UK Government best practice, monetisation is a useful approach, because there is a consistent unit of measurement to compare outcomes with one another and the costs of their production, appealing to decision makers who welcome the clarity and simplicity that monetisation offers. The risk of not valuing an outcome is that these get ignored in analysis and decision making, leading to losses to welfare and wellbeing.
- 7.9 In recent years, techniques have become more sophisticated and allowed the quantification of a wider range of costs and benefits – helping to build the evidence

²² For the appraisal of community woodland asset transfer, as BAU or baseline would likely be more site-specific from which to assess potential additional net impacts of individual project proposals. However, a more general baseline might have some uses in broader extent and condition monitoring.

base and further informing investment assessment in projects which had not been appraised in the past (e.g., projects which impact wellbeing or the environment). However not all costs and benefits can be monetised or even quantified.

- 7.10 Quantitative (numerical), qualitative (descriptive) and monetary (£ values) approaches or a combination of these can be used to assess the relative importance of an outcome. The Green Book provides guidance on both unmonetised and unquantifiable impacts, risks and uncertainties, and how these should be considered within the appraisal process.
- 7.11 There are two key reasons why some indicators may not be monetised within appraisal:
- There is insufficient evidence or research to enable the outcome to be valued appropriately, or it may not be feasible to provide a reasonable estimate.
 - The resources invested in gathering and analysing evidence on the impacts of an intervention are not proportionate to the related costs, benefits, and risks to society as a result of the proposal under consideration. This simply means the costs of evidencing the impacts (for example, a baseline survey of biodiversity within a woodland plot and continued monitoring) are greater than the benefits of the intervention.
- 7.12 The Green Book provides a hierarchy of main techniques that can be used in different circumstances to support the monetisation of non-market value. Whilst each of the approaches have strengths and weaknesses, these techniques: market prices, generic prices, revealed preference, stated preference and wellbeing and estimation of a central reference value and range are considered the most robust. These techniques need to be considered in respect of the specific question, context and requirements. Figure from HM Treasury Green Book provides a brief description of each technique.

Figure 7-1: Valuation Methods for Non-Market Prices



Source: HM Treasury Green Book (2022), pg. 59

7.13 The signposting guide has sought to identify monetised values that align with these techniques. Although it is worth noting that individual studies, even when using widely adopted valuation techniques should also be evaluated for their robustness and relevance to the outcome under investigation. Some sources of monetised values considered provide their own robustness rating (such as ENCA). However, to reflect where gaps in evidence exist, a RAG (red, amber and green) rating has been applied to the strength of evidence for both quantifying the impact (the pathway from intervention to outcome) and monetising the impact within the signposting guide, drawing on Binner et al., (2017). This RAG rating scheme is presented in Table 7-1 below.

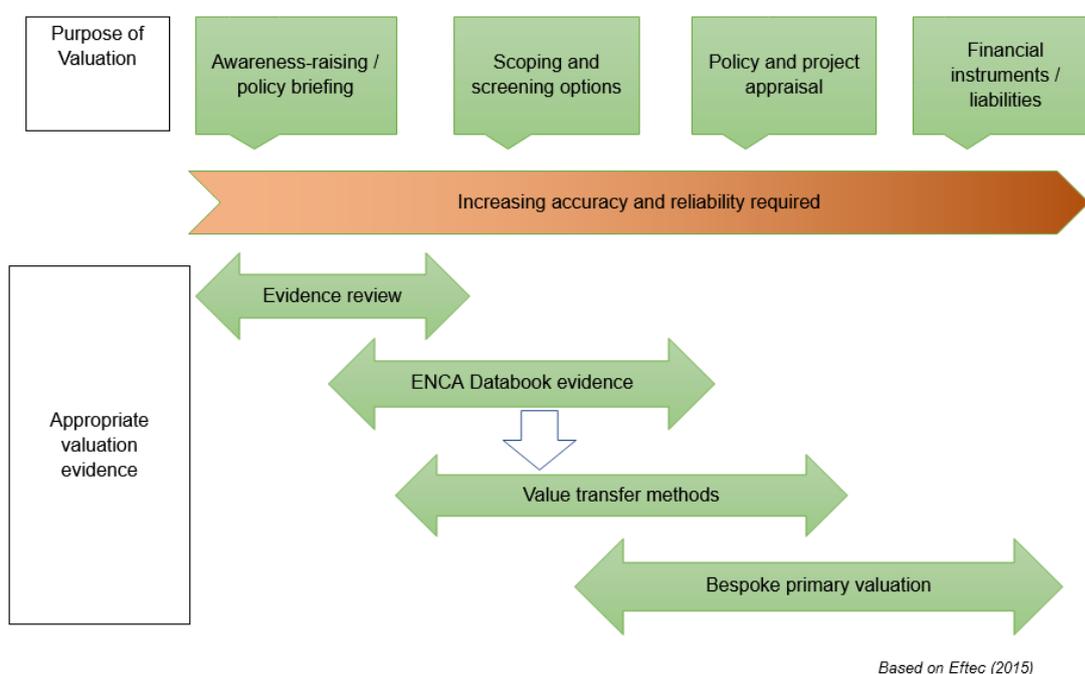
Table 7-1: RAG Rating Schema

Rating	Description
Green	Strong evidence
Amber	Good evidence, but some gaps
Red	Major gaps in evidence

Source: Steer-ED, adapted from Binner et al., (2017)

7.14 ENCA also provides a useful schematic, reproduced in Figure , that reflects the relationship between the purpose of the valuation and the quality of the valuation evidence required. Broadly the diagram illustrates that ‘value banks’ such as ENCA, the Woodland Valuation Tool and EVRI (Environmental Valuation Reference Inventory) that are consistent with Green Book would be appropriate for scoping and screening options and to a degree policy and project appraisal, and are therefore suitable for NRW’s requirements.

Figure 7-2: The relationship between the purpose of the valuation and the quality of the valuation evidence required



Source: ENCA Guidance (2021)

7.15 In the section below, we provide a more detailed vignette of Forestry and Land Scotland’s approach to appraising community asset transfer projects. This draws on an interview with a stakeholder who works with the Forestry and Land Scotland (FLS) Community Asset Transfer Scheme. The vignette provides a contextually relevant and illustrative example of an appraisal framework that has been practically applied to woodland asset transfer for the past 5 years.

Forestry and Land Scotland's approach to proposal appraisal

- 7.16 Forestry and Land Scotland are a governmental agency of the Scottish Government; they manage the land owned by Scottish Ministers, which approximately covers 640,000 hectares. FLS have rolled out a community asset transfer scheme to divest portions of land to community groups intending to utilise the area to create value.
- 7.17 FLS's community asset scheme has been rolled out as part of a wider strategy of community empowerment demonstrated within Part 5 of the Community Empowerment (Scotland) Act 2015²³. The Act introduces a right for community bodies to make requests to all local authorities, Scottish Ministers, and a range of public bodies for any land or buildings they feel they could make better use of. Through this right, the community body can gain temporary or permanent ownership (through long-term leasehold or purchase) of the asset from the public body. The policy encourages underutilised land and assets to provide value to the local community.
- 7.18 The community projects overseen by FLS are very varied and include a range of woodland and non-woodland projects:
- Access and recreation projects, such as providing benches, hides, paths for community use;
 - Converting derelict building shells/barns into community use buildings. For example, one project built a small museum on the edge of a Loch;
 - Sporting projects such as constructing mountain bike trails for the use of community members. Collaboration with the trail association was required as they now maintain some of the 'unauthorised' mountain bike trails;
 - Further sporting projects with examples ranging across sailing, shooting, and archery. Local communities wish to conduct these activities on the land, and require formal permission to do so (this includes organised events);
 - Fishing leases have been issued to local angling associations. The associations manage the fishing rights and issue a limited number of licenses; this has led to a more formal agreement with Scottish Government concerning fishing activity;

²³ See Part 5 of the Community Empowerment (Scotland) Act 2015 – [GOV.SCOT](http://gov.scot)

- Seven hydroelectric generation schemes have been implemented.

7.19 As part of their application, community groups are required to submit an appraisal to FLS who then assess requests against an evaluation framework. Qualitative insights are an important part of the appraisal, difficult to monetise benefits are expressed but do have considerable weighting on the decision whether to transfer the asset. To assist with creating the business case FLS directs the community group to specialist community asset transfer consultants, however, the onus to calculate the benefits is placed on the community group to evidence within their business case.

7.20 In addition to the qualitative insights, FLS also recommends calculating and monetising the expected benefits of the asset transfer where possible. Guidance is provided on FLS website for calculation and monetisation methodologies, for example:

- **Economic benefits resulting from job GVA**—if timber sales were used to fund a forest manager employee, for example, the GVA related to that job can be calculated and included within the appraisal. FLS recommend including GVA of new jobs within the value assessment where possible. In practice, wages have been used by applicants to provide a proxy for employment-related GVA benefits. Only a few of the FLS asset transfer applications include job benefit values, however, and none of those reviewed attempt to calculate GVA from wage figures. As such, wage levels have been used to provide an indication of the benefit to the community, but they have not been used to argue a reduction in purchase price – such discounts are discussed further in paragraph 7.24.
- **Increased visitor numbers**— additional visitor numbers (accounting for displacement) are estimated and valued. For instance, larger visitor effects can be generated by working through a third sector group who can provide resources to encourage community engagement and local people to utilise the forest; building paths without outreach communications may not have large effects on additional visitor numbers;

- **Recreation benefits** can be monetised through willingness to pay²⁴ (WTP) scenarios. WTP scenarios have not been used to demonstrate benefits within any of the FLS asset transfers reviewed. Instead, the value to the community is often calculated through spend values on associated past activity (e.g., Christmas Markets, Music Festivals etc.,) which partially captures the recreation benefit;
- **Community wellbeing:** FLS recommend measuring the Community wellbeing impacts through multiplying volunteer hours per year by the National Living Wage. These benefits are often not substantial: for example, they can amount to £15k, on a £200k land asset valued at market rates.
- **Biodiversity impacts:** FLS express that biodiversity benefits are difficult to measure and monitor and are rarely robustly monetised or quantified in business cases, if at all.

7.21 In terms of ensuring benefit comparisons, FLS have two different assessment standards one for the asset being disposed of regardless of local community involvement and another for the asset not planned to be divested:

- For land being divested, the local community group appraisals calculate likely private sector uses as a counterfactual: this counterfactual often has no community benefits.
- For a land or woodland asset which was not initially going to be divested, the counterfactual is FLS planned activity.

7.22 An independent evaluation panel reviews each business case taking into consideration qualitative and quantified benefits. They also engage with the community group putting forward the case. Challenges are put to the community group to ensure they have the relevant knowledge and experience and are aware of the commitment. This assists in gaining assurance that identified risks will not occur.

7.23 Instead of monetising the costs and risks, the panel eliminates any cases where the risks are significant. This is an important part of the appraisal process. To further

²⁴ technique for the inference of value of a non-marketed good or service from the amount that respondents to an expertly designed survey are willing to pay to acquire a good or service.

counter risks, leasehold arrangements are often initially implemented with full asset ownership an option in the future (if asset management progresses in alignment with the business case). There is also significant consultation with the wider community to ensure:

- The benefits are felt by the community;
- Transparency; and
- Risks are mitigated.

7.24 If accepted following the panel review, the community group can purchase or lease the asset at a discount equivalent to the accurate community/public benefits presented in the business case. This generates a direct monetary incentive to community groups to accurately calculate these benefits. If no monetised benefits are provided, the community group can still purchase or lease the asset at no discount if the transfer request is agreed.

7.25 To explore FLS's appraisal process through example, two summarised asset transfer requests (found on the FLS Community Asset Transfer website²⁵) are presented in Appendix C:

Sources of monetised values and appraisal frameworks considered

7.26 To develop the signposting guide, we conducted a non-exhaustive review of existing valuation tools, appraisal frameworks and specific documents. A high-level review of the sources considered is presented in Appendix D.

7.27 The purpose of the review was to identify if there was a single tool that could be adopted for measuring and monetising the impacts of woodland asset transfer. However, given the range of impacts identified within the evidence review and stakeholder consultations, we find that there is no single 'one-size fits all' framework or tool. As such, the guidance draws on multiple tools. The tools and frameworks considered are listed below.

7.28 Sources falling within central Government Green Book and supplementary guidance:

²⁵ Forestry and Land Scotland, Community Asset Transfer Scheme, Previous Asset Transfer Requests – GOV.SCOT

- HM Treasury Green Book: Central Government Guidance on Appraisal and Evaluation;
- TAG (Transport Analysis Guidance) Databook and accompanying guidance;
- Greater Manchester Combined Authority Unit Cost Database (2019);
- ENCA, including ENCA services Databook, ENCA assets Databook;
- BEIS (2021) Valuation of greenhouse gas emissions: for policy appraisal and evaluation;
- BEIS (2021) Valuation of greenhouse gas emissions: for policy appraisal and evaluation;
- Wellbeing Guidance for Appraisal: Supplementary Green Book Guidance;
- Outdoor Recreation Valuation Tool (ORVal: Version 2.0);
- Defra's Biodiversity Metric 3.1;
- The Woodland Carbon Code;
- Natural Environment Valuation Online Tool (NEVO);
- Green Infrastructure Valuation (GI-Val);
- Woodland Valuation Tool (2018); and
- DCMS (2021) Culture and Heritage Capital Evidence Base – Economic Values Database (consistent with Social Cost Benefit Analysis principles published in HM Treasury's Green Book).

7.29 Sources outside the scope of central Government Green Book and supplementary guidance:

- National TOMs Wales;
- Community Empowerment (Scotland) Act – asset transfers: social value guidance;
- HACT's Social Value Insight Tool and Social Value Bank;
- HM Government Social Value Model;
- i-Tree/ i-Tree Eco;
- Other documentation including ONS online resources, Social Value: Understanding the wider value of public policy interventions.

Guidance to the signposting guide

- 7.30 The signposting guide in the sections below draws on the logic model presented in Chapter 6. Rows have been selected based on the impact dimension identified within the evidence review and consultations with stakeholders and illustrated within the logic model.
- 7.31 It should be noted that the relative importance of each of these dimensions will vary across different types of asset transfer driven by the woodland management agreement with NRW, objectives and activities of the group and the initial condition of the woodland at the point of transfer from NRW to the community group.
- 7.32 Against each impact dimension, the following are presented:
- An illustrative change which aligns to an expected outcome, also presented within the logic model.
 - Factors affecting impact. We have presented factors affecting impact under two headings: factors that communities can directly influence, and situational (exogeneous) factors. Both sets of factors should be included within an appraisal of asset transfer. However, the former set is likely to be the focus of discussions around how a community group can strengthen their project application, since only these factors are within the community group's control. Whilst duration and type of woodland agreement (e.g., duration of management agreement, type of woodland agreement) and durational risks related to the stability (financial and relational) of the community woodland group or third party apply to all impact dimensions, these particular factors have not been included within the tables. However, these are significant factors in relation to the realisation of net benefits and of importance in appraisal.
 - A confidence rating based on the evidence review and stakeholder consultations.
 - Approaches for the quantification of the outcome and selected monetised values where relevant.
 - An assessment of the confidence/ quality of the monetised value, including a RAG rating as presented in Table 7-1, and recommended source for appraisal, where relevant.

directly impacts human wellbeing and where it is additional to other benefits. Further guidance is provided within Green Book Annex 1.²⁸

- 7.38 Net benefits and dis-benefits should be included in the appraisal. For example, if the local community groups wished to construct an education centre, the environmental cost of removing trees previously on that site should be subtracted from the benefits the centre would provide. Alongside the dis-benefits, the expected costs (which includes the risks associated with the transfer of the asset out of Governmental and into community ownership) should be included where possible. The Green Book provides guidance on both monetised and unquantifiable impacts, risks and uncertainties, and how these should be considered within the appraisal process.

²⁸ 'A1. Non-market Valuation and Unmonetisable Values' in HM Treasury Green Book: Central Government Guidance on Appraisal and Evaluation (2022) – [GOV.UK](https://www.gov.uk).

Table 7-2: Signposting Guide

Biophysical impacts

Impact Dimension	Illustrative Change	Factors Affecting Impact	Confidence of Evidence	Approach for Quantification and Selected Monetised Value, where relevant	Confidence/quality of monetised value
Biodiversity and woodland resilience	Greater diversity of tree species and/ or wider biodiversity	<p>Factors communities can directly influence</p> <ul style="list-style-type: none"> Tree planting, including species and extent (e.g., number and type of trees planted), Extent of woodland management and conservation activities (e.g., LISS, habitat restoration or enhancement, invasive species removal) Potential for introduction/ removal of living or non-living elements from habitats (pesticides, restriction of water supply, introduction of pests, pathogens, or invasive species) Potential of disturbance to ecosystem (e.g., increased footfall). <p>Situational influences</p> <ul style="list-style-type: none"> Initial condition of woodland (e.g., woodland quality, extent) Proximity to communities Wider environmental pressures (climate change, pollution, invasive species). 	Limited evidence	<p>Quantification of impact</p> <ul style="list-style-type: none"> Defra's Biodiversity Metric 3.1 ENCA Services Databook: a range of biodiversity indicators. Widely used indicators include number of species, distribution of species, DNA genetic difference based measures of ecological diversity, abundance and population distribution. <p>Other tools to consider not referred to in HMT Green Book/ Green Book Supplementary Guidance</p> <ul style="list-style-type: none"> 'Citizen Ecology' programmes and tools including BioBlitz, LERCs, Seek, iNaturalist and MyTree could act as a potential supplementary tool for baselining and monitoring change against a range of biodiversity metrics. Such tools, could however be subject to bias and reported data may vary significantly in quality. <p>Monetisation of impact</p> <ul style="list-style-type: none"> A range of valuations provided within ENCA Services Databook (Biodiversity Tab, key sources for valuation) on non-use values, mostly drawing on WTP (Willingness to Pay) estimates. NEVO (Natural Environment Valuation Online Tool) allows users to model changes in land use, woodland. The tool draws on Binner et al. (2017), which includes valuations and assessment of quality. Green Infrastructure Valuation (GI-Val) toolkit : a set of calculator tools to assess the value of a green asset or a proposed green investment. Woodland Valuation Tool: identifies research papers and valuation methods associated with Woodland benefits. The benefits themselves include Plant health, subsistence timber products, and soil health. 	<p>Quantification of impact – Amber</p> <ul style="list-style-type: none"> Whilst there is some evidence relating to the pathways between changes in biodiversity and use and non-use values, there are some gaps. Understanding the additionality of an intervention may be disproportionate, although this will be dependent on other factors such as scale and type of activities and asset transfer. NRW and the Welsh Government should investigate and assess the merits of potential use of 'Citizen Ecology' monitoring tools. <p>Monetisation of impact– Red</p> <ul style="list-style-type: none"> A wide range of valuations are identified, however, there is no standardised approach to valuation. There are significant gaps within the existing literature regarding the economic valuation of social and environmental benefits from trees and woodland (Binner et al., 2017) and valuations use a wide range of units, years and scales.
Adaptation	Improved woodland management, quality and woodland expansion can protect against the impacts of	<p>Factors communities can directly influence</p> <ul style="list-style-type: none"> Tree planting, including species and extent (e.g., number and type of trees planted), Extent of woodland management and conservation activities (e.g., LISS, habitat restoration or enhancement, invasive species removal). <p>Situational factors</p>	Limited evidence	<p><i>Flooding</i></p> <p>Quantification of impact</p> <ul style="list-style-type: none"> ENCA Services Databook: (Flood Damage Tab) provides a range of sources evidencing the impact of woodland creation, and existing woodland ecosystems on flooding. i-Tree Eco draws on the i-Tree methodology and is referenced within the ENCA Services Databook. It can be applied to the UK context and enables estimation of quantities of rainfall intercepted, 	<p>Quantification of impact</p> <ul style="list-style-type: none"> Flooding – Red: Limited evidence quantifying the relationship between woodland management, location, and forest design. Temperature regulation– Green: Whilst there is significant evidence for the temperature regulating impact of trees and woodland this primarily related to urban environments.

Impact Dimension	Illustrative Change	Factors Affecting Impact	Confidence of Evidence	Approach for Quantification and Selected Monetised Value, where relevant	Confidence/quality of monetised value
	climate change (e.g., flood risk, woodland stress).	<ul style="list-style-type: none"> Area of woodland in flood risk catchments; existing woodland species type; propensity to flood; population densities or costs of flood water storage. Frequency of hot days; extent of trees / vegetation and blue space; condition of vegetation; extent and type of economic activity affected by hot weather (and proximity to green and blue space). 		<p>stored, transpired, and evaporated by urban forest tree canopies and avoided runoff avoided (surface run off that is no longer needed to be managed). The urban focus of the tool, however, means it may not be relevant for the whole WGWE.</p> <p>Monetisation of impact</p> <ul style="list-style-type: none"> ENCA Services Databook: (Flood Regulation & Flood Damage Tab): a range of values for reduced flood risk due to woodland schemes, and a value for WTP to avoid the health impacts of flooding by respondents who have experienced flooding. Woodland Valuation Tool: a range of values for flood alleviation services, including those drawing on the i-Tree valuation methodology. i-Tree Eco: includes a valuation of avoided run-off due to urban trees and woodland. Wellbeing Guidance for Appraisal: Supplementary Green Book Guidance. Pg. 67: includes estimates and guidance on the impact of single flooding incidents and roadwork incidents caused by flooding. <p><i>Temperature regulation</i></p> <p>Quantification of impact</p> <ul style="list-style-type: none"> ENCA Services Databook (Temperature Regulation Tab): a range of sources evidencing the impact of woodland on reducing heat related stress, primarily within urban environments. Woodland Valuation Tool: identifies to two studies that examine the impact trees on urban heat islands. <p>Monetisation of impact</p> <ul style="list-style-type: none"> ENCA Services Databook: (Temperature regulation tab): a range of values for the cooling effect of woodland in an urban environment. 	<p>Monetisation of impact</p> <ul style="list-style-type: none"> Flooding- Amber: ENCA advises that selected values are likely to be partial (conservative) and more relevant for high-level scoping and strategies than detailed scheme/level appraisals. Climate change is likely to increase the value of the service over time. Temperature regulation - Red: ENCA highlights that whilst valuations are ground breaking of the scalability of the valuations, they are low confidence, and are most relevant for urban areas. There are al significant gaps in the literature (Binner et al., 2017).
Carbon storage and Sequestration	CO2 is removed from the atmosphere and stored as biomass in woodland stands or soil.	<p>Factors communities can directly influence</p> <ul style="list-style-type: none"> Tree planting: species and extent (e.g., number and type of trees planted), Extent of woodland management (e.g., tree life cycle) and conservation activities (e.g., LISS, habitat restoration) Soil health and degradation (e.g., tree planting, conservation activities) <p>Situational influences</p>	Limited evidence	<p>Quantification of impact</p> <ul style="list-style-type: none"> CARBINE Carbon Accounting Tool: estimates the carbon stocks of stands and forests and any associated harvested wood products. It also enables the estimation of Greenhouse Gas (GHG) emissions avoided through use of wood products that displace fossil fuels and other fossil fuel intensive materials. ENCA Services Databook: a range of per hectare estimates for carbon sequestration, including different types of woodland. 	<p>Quantification of impact- Green</p> <ul style="list-style-type: none"> CARBINE, NEVO, ENCA (which draw on CARBINE) and i-Tree all provide high quality conversion factors. i-Tree is not UK specific and is focused on trees and woodland in an urban setting so may not be relevant to all WGWE assets. The Woodland Carbon Code has been developed to support landowners to access the voluntary carbon market.

Impact Dimension	Illustrative Change	Factors Affecting Impact	Confidence of Evidence	Approach for Quantification and Selected Monetised Value, where relevant	Confidence/quality of monetised value
		<ul style="list-style-type: none"> Site conditions Regional climate Sequestration rates are much higher during vigorous growth periods and tail off as trees get older 		<ul style="list-style-type: none"> The Woodland Carbon Code: conversion factors to calculate the carbon reduction impacts from woodland management activities (per ha/ per tree). NEVO: includes carbon sequestration of different habitats. Baseline values can be explored along with modelling the effect of land use changes. I-Tree: estimates for urban tree carbon storage and sequestration. <p>Monetisation of impact</p> <ul style="list-style-type: none"> BEIS (2021) Valuation of greenhouse gas emissions: for policy appraisal and evaluation 	<p>Monetisation of impact – Green</p> <ul style="list-style-type: none"> Whilst other valuations for carbon do exist, BEIS (2021) is used across government for valuing impacts on GHG emissions and supported by HM Treasury Green Book.
Decarbonisation	An intervention that leads to a reduction in CO2e, for example development of a micro-hydro power scheme	<p>Factors communities can directly influence</p> <ul style="list-style-type: none"> Access to funding, or experience and knowledge of financial models to finance schemes (e.g., voluntary carbon market, energy service companies, crowd funding). Activities undertaken (for example, sale of local timber to local suppliers could reduce emissions associated with logistics). <p>Situational influences</p> <ul style="list-style-type: none"> Planning restrictions (e.g., wind turbines); Suitability of site. 	Moderate evidence	<p>Quantification of impact</p> <ul style="list-style-type: none"> BEIS Conversion Factors 2021 provides a wide range of GHG conversion factors to quantify the impact of a range of activities (e.g., vehicle emissions, grid electricity generation, natural gas use). <p>Monetisation of impact</p> <ul style="list-style-type: none"> See impact 'Carbon Sequestration'. 	<p>Quantification of impact – Green</p> <ul style="list-style-type: none"> See impact 'Carbon Sequestration'. <p>Monetisation of impact – Green</p> <ul style="list-style-type: none"> See impact 'Carbon Sequestration'.

Economic and Financial Impacts

Impact Dimension	Illustrative Change	Factors Affecting Impact	Confidence of Evidence	Approach for Quantification and Selected Monetised Value, where relevant	Confidence/quality of monetised value
Local Economic effects	Employment opportunities	<p>Factors communities can directly influence</p> <ul style="list-style-type: none"> Creation of paid employment opportunities Sustainable financial model to ensure employment opportunities are sustained Quality of employment (e.g., job security, social connections, ability to use and develop skills, clear responsibilities, opportunities to have a say in a supportive workplace). 	Limited evidence	<p>Quantification of impact</p> <ul style="list-style-type: none"> Net additional jobs created or safeguarded (Full Time Equivalent) <p>Monetisation of impact</p> <p>Fiscal savings and economic benefits of employment & Training:</p> <ul style="list-style-type: none"> Movement into Employment: Return on Investment Tool: Moving from unemployment to employment/ re-employment 	<p>Quantification of impact – Green</p> <ul style="list-style-type: none"> Quantification of employment created should follow Green Book (2022) guidance on including employment within appraisal, such as accounting for substitution, leakage, and displacement. <p>Monetisation of impact – Green</p> <ul style="list-style-type: none"> All draw on high quality monetised values using methods identified within HM Treasury Green Book

	<ul style="list-style-type: none"> Recruitment practices (e.g., inclusive, opportunities for unemployed, NEETs etc., local) In-employment training Substitution effects <p>Situational influences</p> <ul style="list-style-type: none"> Displacement effects 	<ul style="list-style-type: none"> GMCA Unit Cost Database: Unemployed, NEET or disabled person moving to employment ONS Productivity Valuation: GVA per FTE for a range of sectors, including agricultural and non-manufacturing production, construction activities, timber harvesting, and woodland management. <p>Wellbeing benefits of moving from change in employment</p> <ul style="list-style-type: none"> Movement into Employment: Return on Investment Tool: Moving from unemployment to employment/ re-employment Wellbeing Guidance for Appraisal: Supplementary Green Book Guidance ,pg. 61: Moving from employment to unemployment The Wellbeing Guidance for Appraisal: Supplementary Green Book Guidance ,pg. 61: Change in quality of job <p>Valuations not referred to in HMT Green Book/ Green Book Supplementary Guidance</p> <ul style="list-style-type: none"> Social Value Insight Tool & Social Value Bank a range of monetised valuations for moving into employment and in-work training provided drawing on the subjective wellbeing approach. 	<p>with the exception of the Social Value Insight Tool & Social Value Bank.</p> <ul style="list-style-type: none"> Scaling full-time employment to part-time employment, may not be a linear relationship and depend on individual circumstances.
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Social impacts

Impact Dimension	Illustrative Change	Factors Affecting Impact	Confidence of Evidence	Approach for Quantification and Selected Monetised Value, where relevant	Confidence/quality of monetised value
Social & Cultural Capital	Increase in volunteering opportunities	<p>Factors communities can directly influence</p> <ul style="list-style-type: none"> Creation of volunteering opportunities through activities. Quality of volunteering experience (e.g., support, opportunities for personal development and training, social connectedness, sense of purpose and self-efficacy). Recruitment of volunteers <p>Situational influences</p> <ul style="list-style-type: none"> Demographics of local area 	Strong evidence	<p>Quantification of impact</p> <ul style="list-style-type: none"> Volunteer hours (Social Value Model) Frequency of volunteering (ENCA) <p>Monetisation of impact</p> <ul style="list-style-type: none"> The ONS hourly value of volunteering rate is a common approach to monetising volunteering hours. This is also adopted within the National TOMs Wales. This is also presented within ENCA. Forestry and Land Scotland uses the National Living Wage as proxy for wellbeing benefits of volunteering The Wellbeing Guidance for Appraisal: Supplementary Green Book Guidance ,pg. 63 monetised the wellbeing impact associated with volunteering and uses the subjective wellbeing approach to provide a value for volunteering. ENCA links to the source study and provides figures for different frequencies of volunteering (once a year, several times a year, once a month or once a week). This valuation returns a considerably higher value for infrequent volunteering compared to the ONS or Forestry and Land Scotland. 	<p>Quantification of impact - Green</p> <ul style="list-style-type: none"> McGarvey et al. (2019) identified a number of factors that can contribute to poor quality volunteering experience leading to lower levels of volunteer satisfaction and retention. Stuart et al. (2021) identifies a range of groups that experience particularly high levels of wellbeing improvements due to volunteering compared to others, and also groups where there is minimal evidence (different ethnic groups, young people, disabled people and those experiencing serious mental health issues). <p>Monetisation of impact– - Green</p> <ul style="list-style-type: none"> The ONS hourly value of volunteering rate aligns with Welsh TOMs and similar appraisal approaches for Community Asset Transfer (i.e., Forestry and Land Scotland), and may be more appropriate for irregular volunteering.

				<p>Valuations not referred to in HMT Green Book/ Green Book Supplementary Guidance</p> <ul style="list-style-type: none"> Social Value Insight Tool & Social Value Bank: a monetary value for regular volunteering (defined as volunteering once per month for at least two months). 	<ul style="list-style-type: none"> The subjective wellbeing approach accounts for the wellbeing benefits of regular volunteering and the frequency. Social Value Insight Tool & Social Value Bank is not referenced within HM Treasury Green Book or supplementary guidance. Users should review sources and valuations for their robustness and agree a set of valuations and related metrics to avoid bias and establish consistency within appraisals where these valuations are relevant.
	<p>Cultural/educational activities are richer and more diverse than otherwise</p>	<p>Factors communities can directly influence</p> <ul style="list-style-type: none"> Activities of CWG. Scale and extent of activities, including marketing to increase attendance. Extent of partnerships with other charitable, public and private sector organisations (e.g., Forest Schools, local schools, local/ national cultural organisations such as the Arts Council). Quality of activities. Inclusiveness of activities. <p>Situational influences</p> <ul style="list-style-type: none"> Demographics of local area. Extent of existing cultural/ educational activities within the locale. 	<p>Moderate evidence</p>	<p>Quantification of impact</p> <ul style="list-style-type: none"> Qualifications completed Attending a training event Attending a cultural event Nature-based school visits (number of beneficiaries) <p>Monetisation of impact</p> <ul style="list-style-type: none"> ENCA Services Databook (Education Tab): valuations specifically related to ecological education trips. GMCA Unit Cost Database: fiscal savings and economic benefits related to training (e.g., acquirement of NVQ levels 2+, apprenticeships level 2 & 3). The Wellbeing Guidance for Appraisal: Supplementary Green Book Guidance, pg. 64: links to a range of sources for valuation of visiting and using cultural and heritage assets. <p>Valuations not referred to in HMT Green Book/ Green Book Supplementary Guidance</p> <ul style="list-style-type: none"> Culture and Heritage Capital Evidence Bank: a range of valuations for a range of cultural activities including an overall RAG rating for the quality of the evidence and valuation. HACT's Social Value Insight Tool & Social Value Bank: relevant outcomes include apprenticeships, vocational training, general training for a job (training event) and employment training (training event). 	<p>Quantification of impact – Green</p> <ul style="list-style-type: none"> Standard additionality guidance identified within HM Green Book should be followed. <p>Monetisation of impact– - Green</p> <ul style="list-style-type: none"> ENCA highlights that there are limitations regarding the length, duration, and cost of educational trips. For example, scaling the impact of regular visits to a forest school may not be linear. Furthermore, the willingness to accept (WTA) approach may underestimate the impact of educational trips. The Social Value Insight Tool & Social Value Bank provide monetised values for apprenticeships and vocational training, these are based on enrolment rather than completion. There is no guidance on scaling general training for a job (training event) and employment training (training event) for the duration of the training. The Social Value Insight Tool & Social Value Bank is not referenced within HM Treasury Green Book or supplementary guidance. Potential to double count with volunteering impacts and/or wellbeing impacts (e.g., recreational use).²⁹.
Wellbeing	<p>An increase in individual health and wellbeing due to</p>	<p>Factors communities can directly influence</p> <ul style="list-style-type: none"> Woodland infrastructure to enhance access Improved quality of woodland Specific interventions and partnerships (e.g., social prescribing, woodland bathing) 	<p>Strong evidence</p>	<p>Quantification of impact</p> <ul style="list-style-type: none"> Increases in recreational use of woodlands (e.g., visitor numbers, types of activity and frequency of visits (ENCA Services Databook and OrVal)) 	<p>Quantification of impact – Green</p> <ul style="list-style-type: none"> OrVal is useful for a baseline initial assessment but may be limited in the context of micro-interventions such as path quality, or signage at individual sites. However, ENCA advises it is a first approximation in the absence of site-specific data on visitor numbers.

²⁹ See paragraph 7.33

	<p>recreational use of woodlands.</p>	<ul style="list-style-type: none"> Overuse by visitors can undermine conservation activities. <p>Situational influences</p> <ul style="list-style-type: none"> Demographics of local communities (e.g., proximity to residential sites) Over use of asset by visitors Damage to infrastructure by third parties (e.g., felling contractors). 		<ul style="list-style-type: none"> Beneficiaries of social prescribing (e.g., Woodland Therapy Groups for those suffering from chronic physical health issues or mental health disorders). <p>Monetisation of impact</p> <ul style="list-style-type: none"> OrVal: valuations for per visit to woodlands. NEVO draws on OrVal valuations but applies to a grid-square area rather than a site basis. ENCA Services Databook (Recreation Tab and Mental Health Tab): a range of valuations, including WTP values for a range of specific forest recreation groups for various scenarios and forests attributes, and per visit use values. TAG's AMAT: a range of benefits and costs associated with modal shifts, particularly in relation to new and existing cyclists and walkers. Woodland Valuation Tool: valuations for a range of woodland recreational activities, including the benefits of non-timber products. Includes a mix of UK specific and international studies, some of which are not relevant to Wales (e.g., Tropical forests). <p>Valuations not referred to in HMT Green Book/ Green Book Supplementary Guidance</p> <ul style="list-style-type: none"> Forest Research report Valuing the Mental Health Benefits of Forestry – Phase 2 provides a range of aggregate values for estimating the mental health benefits of access to woodlands using an avoided cost approach to valuing the benefits of the reduced prevalence of mental illness. Public Health England's Improving access to greenspace: A new review for 2020: evaluates the evidence for increased access to greenspace on both physical and mental health and provides a range of valuations. The World Health Organisation's Health Economic Assessment Tool (HEAT) provides values for the benefits derived from habitual walking and cycling as recreational activities. 	<p>Monetisation of impact – Green</p> <ul style="list-style-type: none"> There is no 'best practice' or standardised approach to valuation, but across all the sources, there is wider coverage of different activities. Some valuations within the ENCA Services Databook, NEVO and OrVal use a travel-cost approach which will underestimate the wellbeing impact. Approaches using Quality Adjusted Life Years (QALYs) or subjective wellbeing will have significantly higher values. Distinction should be made between irregular and frequent use of the woodland. There are also limitations in the scaling of impacts (e.g., regular use to single visits and vice versa). Substitution effects (e.g., choice between multiple sites, or substitution away from other activities) can lead to overestimation of valuation.
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Participatory impacts

Impact Dimension	Illustrative Change	Factors Affecting Impact	Confidence of Evidence	Approach for Quantification and Selected Monetised Value, where relevant	Confidence/quality of monetised value
Community quality of life	Community feels more engaged with their local woodland/ a	<p>Factors communities can directly influence</p> <ul style="list-style-type: none"> Tree planting: species and extent (e.g., number and type of trees planted), 	Moderate evidence	<p>Quantification of impact</p> <ul style="list-style-type: none"> ENCA Services Databook: a range of reporting metrics for changes to amenity value such as % increase in house prices, local-scale environmental quality factors, changes in land use type within 1km grid square of a property. 	<p>Quantification of impact – Green</p> <ul style="list-style-type: none"> The Social Value Insight Tool & Social Value Bank and ENCA Services Databook provide information on reporting metrics.

	reduction in anti-social behaviour.	<ul style="list-style-type: none"> Extent of woodland management (e.g., tree life cycle) and conservation activities (e.g., LISS, habitat restoration). Improvements to woodland infrastructure (e.g., pathways, access points, benches). Activities undertaken within the woodland asset and diversity of beneficiaries. Partnerships with other institutions <p>Situational influences</p> <ul style="list-style-type: none"> Overuse factors. Proximity to residential areas/ size of community impacted by woodland. Wider socio-economic factors affecting the propensity of the wider community to engage with the community woodland. Initial condition of the woodland. 		<ul style="list-style-type: none"> Reported incidents of anti-social behaviour, crime or other sources of disamenity in close proximity to the woodland. <p>Other tools to consider not referred to in HMT Green Book/ Green Book Supplementary Guidance</p> <ul style="list-style-type: none"> Social Value Insight Tool & Social Value Bank: potential survey questions to measure changes across a range of self-reported improvements in life satisfaction metrics. <p>Monetisation of impact</p> <ul style="list-style-type: none"> Wellbeing Guidance for Appraisal: Supplementary Green Book Guidance pg. 65 identifies a range of valuations for the impact of crime (drawing on the Home Office Cost of Crime approach established through a QALY approach), noise and changes to vacant land. The GMCA's Unit Cost Database provides a range of fiscal and economic costs/benefits related to crime and anti-social behaviour. ENCA Services Databook (Amenity and Landscape Tab) provides a range of valuations in relation to reducing disamenity of increases in amenity value due to proximity to greenspaces using WTP and hedonic pricing approaches. <p>Valuations not referred to in HMT Green Book/ Green Book Supplementary Guidance</p> <ul style="list-style-type: none"> Social Value Insight Tool & Social Value Bank: reporting metrics and valuations of multiple wellbeing and social outcomes. Relevant outcomes include “no problem with anti-social behaviour”, “not worried about crime” or “no litter problems”. These outcomes have estimated ready reckoner values ascribed to them to calculate their value, with accompanying Likert scale surveys to capture ex ante and ex-post experiences. 	<ul style="list-style-type: none"> The Social Value Insight Tool & Social Value Bank is not referenced within HM Treasury Green Book or supplementary guidance. Social Value Insight Tool & Social Value Bank requires the collection of survey data to establish the extent to which an impact has been realised. <p>Monetisation of impact – Green</p> <ul style="list-style-type: none"> There are a wide range of monetised values that align with HM Treasury Green Book standards, that are likely to cover most, if not all of the impacts reported by CWGs. The Social Value Insight Tool & Social Value Bank is not referenced within HM Treasury Green Book or supplementary guidance.
Community Empowerment	The community is empowered through the CWG to diversify activities beyond the woodland asset.	<p>Factors communities can directly influence</p> <ul style="list-style-type: none"> Engagement with the wider community and drawing support from intermediaries such as Llais y Goedwig to share knowledge and experience. Retention of CWG members, including diverse members to reduce durational risks. Diversity of CWG membership 	Limited evidence	<p>Quantification of impact</p> <ul style="list-style-type: none"> Qualitative approaches (focus groups, interviews, surveys) and quantitative approaches (Likert or Linear Numerical Surveys) could be adopted. <p>Other sources to consider not referred to in HMT Green Book/ Green Book Supplementary Guidance</p> <ul style="list-style-type: none"> Self-reported improvements by beneficiaries, for example changes in life satisfaction measured through a range of reporting metrics HACT's Social Value Insight Tool & Social Value Bank provides potential survey questions to measure changes across a range of reporting metrics. <p>Monetisation of impact</p>	<p>Quantification if impact – Red</p> <ul style="list-style-type: none"> Community empowerment can take multiple forms, as such standardised approaches form measuring, and valuing community empowerment are difficult to quantify. Qualitative approaches (focus groups, interviews, surveys) and quantitative approaches (Likert or Linear Numerical Surveys) provide the greatest potential for quantifying impact. <p>Monetisation of impact– Red</p> <ul style="list-style-type: none"> Wellbeing Guidance for Appraisal: Supplementary Green Book Guidance may provide some potential for monetising community empowerment, although the range of relevant metrics and valuations are limited.

		<ul style="list-style-type: none"> • Activities undertaken within the woodland asset and diversity of beneficiaries. • Partnerships with other institutions <p>Situational influences</p> <ul style="list-style-type: none"> • Overuse factors. • Proximity to residential areas/ size of community impacted by woodland. • Wider socio-economic factors 		<p>Wellbeing Guidance for Appraisal: Supplementary Green Book Guidance identifies valuations, including loneliness and personal, social and civic development.</p> <p>Valuations not referred to in HMT Green Book/ Green Book Supplementary Guidance</p> <ul style="list-style-type: none"> • Social Value Insight Tool and Social Value Bank: reporting metrics and valuations of multiple wellbeing and social outcomes and draws on the subjective wellbeing approach. Relevant, albeit limited, outcomes include “feel belonging to neighbourhood” and “able to obtain advice locally”. These outcomes have estimated ready reckoner values ascribed to them to calculate their value, with accompanying Likert scale surveys to capture ex ante and ex-post experiences. 	<ul style="list-style-type: none"> • Social Value Insight Tool and Social Value Bank is not referenced within HM Treasury Green Book or supplementary guidance. • Community empowerment, whereby a community diversifies its activities beyond those related to the woodland asset (for example, setting up a local shop) could be measured and valued using reporting metrics and valuations signposted in other impact dimensions above. • Monetising impacts would have to be approached on a case-by-case basis.
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8. Conclusions and Next Steps

Summary of findings

8.1 The purpose of this work has been threefold:

- To explore and evaluate the evidence of social, economic and environmental benefits, costs and risks related to woodland asset transfer to community groups/ third sector organisations through a non-exhaustive evidence review and stakeholder consultations;
- To examine the available data and methods that could be used by NRW to support future appraisal of projects in relation to community or third sector access to woodland and/or timber on the WGWE. This might include for example transfer of ownership (including short or long-term leasing); and conditional or minimal-condition transfers, management, or sale at below market price; and
- To propose a propose practical assessment approach for NRW to appraise, monitor and evaluate the benefits, costs (and risks) of projects involving the transfer of woodland/timber assets to community organisation across a range of management or ownership models effectively and robustly.

8.2 The key findings from the research undertaken are summarised below.

Evidence Review

8.3 The literature identified and reviewed suggests there are a wide range of potential social, environmental, and economic impacts (and risks) from the transfer of timber assets to third parties, and specifically community forestry groups and social enterprises. However, in line with earlier reviews, we find that there is a consistent lack of robust empirical evidence in relation to the realised impact of asset transfer on communities and wider society, and particularly in relation to biophysical, and economic and financial impacts. Evidence is strongest, however for wellbeing impacts related to improved woodland access/ exposure and participation in volunteering (see Table 4-1).

- 8.4 Limited baseline and longitudinal data were highlighted by sources reviewed as one of the reasons that robust evidence is not available and is particularly problematic for biophysical impacts such as woodland resilience, increased woodland biodiversity and carbon storage and sequestration. Furthermore, evaluations often reflected funders' priorities which meant evaluation approaches were not consistent. This indicates that collecting baseline and monitoring data and taking a consistent approach to evaluation would be helpful to build this evidence base.
- 8.5 Much of the literature reviewed did not consider the extent to which impacts from the transfer of woodland assets to the community would be additional to those that could be achieved if management and ownership of the woodland stayed as it was. Again, this relates to the limited number of formal evaluations following HM Treasury Green Book and Magenta Book guidance. As such the evidence reviewed is broadly inconclusive as to whether impacts related to woodland asset transfer are additional to those that could be achieved by the transferor (i.e., NRW). Instead, the evidence suggests that CWGs may be more likely to undertake particular activities than public owned and managed woodlands, if they are in line with the group's objectives. In turn, in some instances, they may be more likely to achieve benefits highlighted in the evidence review. In particular, the evidence also suggests that benefits are more likely to be perceived to be additional in areas of woodland that are currently unproductive or under-utilised.
- 8.6 Whilst woodland asset transfers to third parties, and particularly community groups or social enterprises, do have the potential to create a range of environmental, social, and economic benefits, robust evidence that can be generalised is lacking.

Stakeholder Consultations

- 8.7 Consultations with NRW and CWGs identified:
- All CWGs interviewed were different in scale and location, yet they all had similar aims; to create benefits for their local community. These included:
 - Improving biodiversity, health (including supporting Health Board patients) community cohesion and participation, and community capability and confidence;

- Providing opportunities for education and skills development to increase employability; and
- Reducing anti-social behaviour and pressure on Public Services.
- NRW interviewees felt empowering CWGs and supporting them to thrive contributed to flourishing places and enabled NRW to meet its strategic aims. Similarly, CWGs interviewed viewed their role as enabling NRW to meet their own objectives.
- All assets managed by the CWGs interviewed were non-prime woodlands.
- Costs and risks were highlighted; however, were seen as small in nature in proportion to the totality of NRW's activity.
- Interviewees felt there was a common risk to all CWGs of organisations structure instability of the organisation structure due to personnel turnover or retention of volunteers. Given this, an objective for all CWGs should be that they avoid being narrow in interest and engage the whole community during co-design at inception.
- While management plans that CWGs submit to NRW were viewed to be sufficient and appropriate in order for progress between parties to be aligned. With no specific template for CWGs to follow, however, a signposting tool or simple logic model aligned to NRW expectations could help to demystify how CWG can connect their own particular objectives to relevant and proportionate benefits. The logic model can act as the golden thread that ties strategic aims to known positive outcomes.
- Finally, there is opportunity for the timber industry to work with CWG, as opposed to working around them or damaging their activity

Practical Recommendations for NRW (signposting guide)

- 8.8 As part of the development of a guidance to inform the development of an appraisal framework for proposals which involve the transfer of woodland asset management from NRW to community of third sector organisations in Wales, a review of a range of tools was undertaken.
- 8.9 The review identified a wide range of tools that could potentially support the appraisal of woodland asset transfer proposals, including those that fall within the

central Government and supplementary guidance. Some of these will likely need further consideration given these are outside applicable guidance sources, but may, in appropriate circumstances, have some role in informing estimations where there are remaining evidence gaps.

- 8.10 Given the range of impacts identified within the evidence review and stakeholder consultations, we find that there is no single ‘one-size fits all’ framework or tool but a key starting point is the Green Book and supplementary guidance resources. As such, the signposting guide presented in Chapter 7 draws on multiple tools, but it is important for users to be aware of the basis and suitability of these sources for the case at hand, including their limitations.
- 8.11 For many potential impacts of woodland asset transfer, there are range of robust methods for quantifying and monetising impacts, so informed decisions are required about such choices. The selection of the values should be based on utilisation of robust and suitable approaches and sources -, but may also be dependent on available data, measures taken to minimise double counting and the willingness of NRW to purchase licence agreements to some of the tools.

Summary of research

- 8.12 Drawing on the research presented in this report, Table 8-1 presents a summary of key findings from the evidence review, stakeholder consultations and review of data and methods for measuring and monetising impact. It aims to provides an indication of the state-of-knowledge of both impacts (benefits, costs and risks) and potential to incorporate quantified and monetised impacts into a VfM/ BCA assessment.

Table 8-1: Summary of quality of evidence

Impact	Quality of evidence for potential impact of community asset transfer	Quality of evidence for monetisation
Biodiversity and woodland resilience	Limited	Weak
Adaptation	Limited	Weak
Carbon storage and Sequestration	Limited	Strong
Decarbonisation	Limited	Strong
Local Economic Stimulus	Limited	Strong
Social & Cultural Capital	Moderate	Strong
Wellbeing	Strong	Strong
Community quality of life	Moderate	Strong
Community empowerment	Limited	Weak

Source: Steer-ED

- 8.13 Of the nine impact areas identified in Table 8-1, social and cultural capital, community quality of life and wellbeing impacts are considered to have ‘strong’ or ‘moderate’ quality of evidence for potential impact and monetisation. This is because there is a wider body of high-quality empirical research to draw on within the wellbeing domain and community asset transfer literature. This is driven by an active research agenda in the field of wellbeing, and a wider body of literature evaluating the impact of community asset transfer (non-woodland assets). In other words, there is a publication bias.
- 8.14 In contrast, there is a consistent lack of robust empirical evidence in relation to the other six impact areas presented in Table 8-1 and/or there are a greater range of confounding factors. In particular, there are three impact areas that appear to be especially limited both in terms of the existing evidence that community woodland asset transfer leads to the generation of benefits, costs and risks and the available tools to monetise these. These include biophysical impacts (biodiversity, woodland resilience, and adaptation) and community empowerment. These impacts are challenging and resource intensive to measure, and there are significant limitations to monetisation. These are discussed in more detail below.

- 8.15 **Community empowerment:** Whilst the literature reviewed regularly cited community empowerment as an impact related to community woodland asset transfer, there was limited robust evidence (namely, evaluations) to support this. The stakeholder consultations undertaken as part of this project provided some supporting evidence that community empowerment can occur. For example, one CWG had set up a shop run by volunteers in a nearby village (turnover £140k). The experience of setting up and running the CWG stemming from a management lease agreement gave the group confidence to develop further projects. Furthermore, the literature on community asset transfer provides further supporting evidence on both benefits, costs and risks associated with this impact theme. Impacts could be captured qualitatively or quantitatively, but the lack of robust, HM Treasury Green Book valuations means that monetisation will be challenging given current knowledge.
- 8.16 **Biophysical impacts:** A potentially important benefit of woodland asset transfer is improvement to the quality of the woodland and ecosystem services. Despite this, the evidence review identified there are limitations in relation to quantifying and monetising biophysical impacts.
- 8.17 First, existing evidence that biophysical impacts are realised as a result of woodland asset transfer is lacking.
- 8.18 Second, understanding the additionality of biophysical interventions may be disproportionate to the value created given the need to baseline and monitor changes within complex ecosystems. Although there are tools that enable the modelling of potential biophysical impacts, the site-specific nature of woodland ecosystems and associated services means that their robustness is limited. This has proved to be less problematic for projects where woodland expansion is one of the primary objectives, however. For example, reforestation or afforestation programmes, where baseline data is more readily available and additionality more evident.
- 8.19 The challenge of additionality was widely reported within the literature reviewed. To address this, evaluation of the woodland at transfer and continued monitoring of the quality of the woodland should be maintained for the duration of the woodland

transfer agreement. Site surveys by NRW, CWGs or independent third parties could be undertaken. 'Citizen Ecology' programmes and tools such as LERC, Seek or iNaturalist also offer the opportunity to collect baseline data and monitoring over time. Given the limitations of such approaches, such as bias and variability in quality of data collected, these would need to be reconciled with the requirements of central government appraisal guidance such as the HM Treasury Green Book.

- 8.20 Third, whilst there is some evidence relating to the pathways between changes in biodiversity and use and non-use value, there are also significant gaps in the understanding of these pathways. Nevertheless, given the potential risk for mismanagement resulting in significant costs to society and NRW (e.g., remediation costs) and the potential materiality of biophysical impacts, assessment of whether impacts can be both measured and monetised should be done on a case-by-case basis. It is, however, noted this may be challenging given current knowledge.

Recommended Next Steps

- 8.21 **NRW could aim to pilot the recommended signposting guide before embedding it across the wider organisation.** The recommended signposting guide presented within this report will need to be piloted within NRW with a user-group to identify training needs, co-design reporting templates, additional guidance and areas where specialist expertise may be required. It will also be important to understand where transfers may lead to additional costs to NRW (both financial or otherwise) – the evidence review has provided some indication of these. NRW should assess whether they can take on these additional costs in advance of and as part of the appraisal process, balancing these against the benefits woodland asset transfer can bring.
- 8.22 **NRW should consider establishing a set of valuations and related metrics that are 'approved for use' from the 'value banks' identified.** The purpose of the signposting guide was to provide a wide range of valuation sources that cover the impact of all activities that could be undertaken by CWGs. The wide range of monetised values presented reflect the diversity of activities undertaken by CWGs. It was, however, beyond the scope of this study to examine each valuation individually. Given this, there are multiple valuations available in the signposting

guide for the same outcome. As such, users (for example, an NRW user group) should review sources and valuations for their robustness, pilot valuations and establish sensitivities with a view to agree a set of valuations and related metrics 'approved for use'. Whilst the selection of metrics and valuation will vary on a case-by-case basis depending on the asset and proposed activities of the CWG, agreeing a suite of approved metrics and valuations will minimise selection bias and establish consistency across appraisals. As key valuation sources such as ENCA are updated, these valuations should be reviewed on, for example, an annual or biennial basis to keep pace with developments within the literature.

8.23 NRW should draw on learning and experience from existing woodland asset transfer programmes (e.g., Community Asset Transfer Scheme in Scotland).

NRW could consider further consultation with Forestry and Land Scotland, to draw on experience and learning from the Community Asset Transfer Scheme.

Community organisations have a right to request to take over publicly-owned land or buildings that they feel they can make better use of for local people. Forestry and Land Scotland have developed an asset transfer appraisal process that places the onus for demonstrating impact and considering costs and risks on the proposing community group which is then reviewed by an expert panel and augmented with site visits. CWGs interviewed expressed a 'rigid' framework for monitoring and measuring outcomes could stymie innovation and could potentially be resource intensive, particularly when CWGs are already stretched. Whilst Forestry and Land Scotland were consulted as part of the project, follow up consultation is advised.

This would enable NRW to draw on experience and learning from development and implementation of a similar scheme, within a similar context.

8.24 NRW should develop a simplified version of the signposting guide for CWGs.

In line with Forestry and Land Scotland's approach, developing a simplified version of the signposting guide, comprising 'approved for use' metrics and valuations and CWG specific guidance could provide a first approximation of at the proposal stage. Given potential additional costs to NRW should CWGs proposals and operational management agreements increase significantly, this could be an effective way to screen proposals could minimise costs. Furthermore, this approach could be adopted from proposal approval to project inception to co-design the monitoring and

reporting protocols and risk registers. This would cultivate partnership working with NRW from the outset.

8.25 NRW should pilot the signposting guide combined with comprehensive, standardised and systematic evaluation of woodland asset transfer projects.

This approach would enable NRW to build an evidence base of the scale and extent of impacts resulting from woodland asset transfer, particularly where evidence gaps exist. This would also facilitate NRW to identify the largest most variable factors that affect impact realisation. The evidence collected within this study provides some qualitative insight from stakeholder consultations and the evidence review in relation to the impact of the scale and extent of different activities carried out by CWGs. The evidence is, however, limited to the extent that conclusions are partial and unquantifiable at present. The summary of quality of evidence presented in Table 8-1 however, provides some indication of the state-of-knowledge of both impacts (benefits, costs and risks) and potential to incorporate quantified and monetised impacts into a VfM/BCA assessment. It will be important that NRW are able to identify some sort of baseline to monitor benefits against and that progress is assessed over time to help provide an indication of the impact any woodland asset transfer has had. This may also help start to identify where impacts are additional.

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Appendix A – Call for Evidence

Steer Economic Development (Steer-ED) has been commissioned by the Welsh Government to identify and review the existing evidence on the nature, scale and persistence of benefits, costs and risks of woodland and/or timber asset transfers to third-parties/ community groups. The evidence review will inform the development a practical assessment approach for Natural Resources Wales (NRW) to use in robustly appraising the benefits, costs and risk of these projects, including information on how they can be applied and appropriately quantified.

In order to ensure that this review is as comprehensive as possible, we are keen to collate materials that are considered **critically important or may not be returned in our search strategy** (online search tools, cited reference searches and manual bibliography searches), for example, unpublished reports. In particular, we are interested in identifying empirical literature (i.e., exclude opinion or theoretical literature)

- Evaluations of projects, programmes and interventions related to 'community forestry'/ 'community woodland' / 'community woodland management' in the UK and other countries with similar socioeconomic profiles and climates;
- Evaluation frameworks developed to evaluate outcomes of community forestry; and
- Existing evaluation frameworks that exist to assess the impact of woodlands and forests managed by public agencies including recently reported data.

Appendix B – Topic Guides - Scoping Consultations

Short introduction to project and request permission to record for transcription (2 minutes). The chat function to be disabled for all stakeholder engagement/ consultation via MS Teams/ other video conferencing as per GDPR requirements.

Request short introduction from interviewee (2-3 minutes): Note, this information should be used to tailor the set of questions below according to expertise. Not all questions will be relevant to all interviewees, and the focus of the interview protocol will need to reflect the background of the interviewee i.e., social value expertise, policy expertise.

A privacy notice was shared with participants in advance of consultations. This is presented in Appendix D.

Mapping Stakeholders to Themes

		Themes			
		Objectives	Priorities	Legal	Baseline Evidence/ Further Data to use
Stakeholders	NRW (Timber Sales)	✓	✓	✓	✓
	Skyline Project	✓		✓	✓
	Llais y Goedwig	✓			✓
	Welsh Treasury	✓	✓	✓	✓

Questions / Answer Sheet

Questions	Stakeholder	Answer
<ul style="list-style-type: none"> Can you tell us a little bit about your organisation, and your involvement with community forestry? How do you understand 'community forestry'? 	All	
Timber & Woodland Objectives		
Within your organisation, what are the main sectoral, environmental, social and market objectives in relation to woodland assets (including the sale of timber and non-timber forest products)?	All	
In your opinion do these align with the objectives of other forestry institutions (NRW/ Welsh Government/ Welsh Treasury/ Community organisations/ institutions), if not why?	All	
Study and Objective Priorities		
What are the main drivers, concerns, and risks in relation to management of the Welsh Government Woodland Estate and NRW forestry activities?	NRW	
	Welsh	
	Treasury	
<ul style="list-style-type: none"> Some of the objectives have competing targets, namely, delivering well-managed timber production whilst supporting Net Zero objectives through carbon sequestration or maintaining and enhancing biodiversity. Are these different objectives seen as competing? How are competing priorities managed? 	NRW	
	Welsh	
	Treasury	
Altering NRW strategy and legal hard-stops		
<ul style="list-style-type: none"> What are the key legal frameworks you have to comply with? For 	NRW	

example, quotas for delivering timber, asset transfer potential (through long leases), State Aid restrictions, maintaining natural woodland areas, carbon sequestration (including verified offsetting schemes/ offsetting guidelines, management/ registries i.e. Woodland Carbon Code)?

Skyline

Welsh
Treasury

Baseline Evidence/ Further Data to use

- How does your organisation currently measure, monitor and evaluate social value (environmental, social and economic impacts) in relation to the WGWE/ timber assets/ non-timber forest products/ woodland? All
- What frameworks or guidelines do you work to? Would you be willing to share this with us {if yes follow up in email}?
- Do you feel there are any limitations to these frameworks or guidelines?
- To what extent is 'social value' incorporated into formal economic evaluations?
- How does 'social value' measurement, monitoring and evaluation currently inform decision making? And what priority is given social value?

-
- What data (qualitative and quantitative) do you currently collect in relation to social value? All
 - How regularly is this data collected?
 - Are there any challenges or gaps in relation to data collection?
 - Would you be willing to share these data with us for the purposes of this project? {if yes follow up via email}

-
- What evidence do you currently have/collect regarding the social, environmental, economic impact (benefits, costs, risks) of the transfer of assets to community? All
-

organisations/ your programme/project/ initiative?

- To what extent are distributional impacts considered within your analyses?
- Would you be willing to share this evidence with us for the purposes of this project? {if yes follow up via email}

More broadly, what are the key datasets/evidence/ frameworks you are aware of which may help analyse the impact of the social value of woodland/timber? All

Further information

Who else should we speak to? Who are the main stakeholders and who can provide data/values/evidence to inform our study? All

What are the key reports/articles/datasets we should be aware of? {if yes follow up via email} All

Any further comments? All

Appendix C – Stakeholder Consultations

Objectives of the stakeholder engagement

The objectives of the sessions vary by stakeholder cohort as presented below.

- Place-based teams in NRW that manage the Welsh Government Woodland Estate (WGWE) (n=3-4)
- Understand how place-based NRW teams currently consider each asset transfer arrangement in terms of the benefits that they associate with each, based on their experience of working with community groups/third sector to date (purchasing of harvested timber, right to harvest timber, lease or loan arrangement, freehold)
- How could NRW better support community groups to target realisation of additional benefits from the start of the assessment process?
- How do NRW weigh up the benefits, costs and risks in relation to each asset transfer arrangement to inform decision-making?
- How can community groups/third sector be better held to account to meet the additional benefits they set out?
- *Optional:* To further drawn on the place-based team's own connections, we can also provide a link to a short survey that we will invite interviewees to share through their networks. The survey will seek understand the materiality (e.g. type, scale, durability) of potential social value outcomes³⁰ linked to the Wellbeing of Future Generations Goals, from additional groups.
- Community groups in Wales (n= 5, to include an SME and VCSE (a social enterprise))
- To understand the main purpose (objective(s)) each group is seeking to achieve and the relevant broad timescale (i.e., which of the Well-being Goals and social value outcomes community groups most prioritise)
- To understand who each group feels is a direct beneficiary of their group's purpose and arrangement type
- To understand the additional benefit realised by each main beneficiary type

³⁰ Materiality is defined as: '*...issues that have a direct or indirect impact on an organisation's ability to create economic, environmental and social value for itself, its stakeholders and society at large.*'

- To understand the costs each community group faces in relation to their main objectives and arrangement type
- To understand how each community group feels they could better measure each benefit, if they are doing so already (and how) and if they are driven to
- To understand how each community groups feels they could be better assessed on realising their objectives from the start of their inception.
- Interview with CWGs outside of Wales (n=2, one Scottish and one English group
- To understand how (and the extent to which) they currently measure the social, environmental, or economic benefits access to woodland provides them;
- To understand the key objectives of each group's initiative in relation to their arrangement type;
- To understand what the benefits are to each of the stakeholders from the initiative, above and beyond their core objectives and compared to the baseline situation prior to asset transfer;
- To understand the key risks to achieving these objectives, how much consideration is given to risks and risk management, and how they have mitigated or otherwise managed them in the past; and
- To understand if/how they were assessed on their aims and delivery from the start of the project.

Interview protocol

Short introduction to project & request permission to record for transcription (2 minutes). The chat function to be disabled for all stakeholder engagement/ consultation via MS Teams/ other video conferencing as per GDPR requirements.

Request short introduction from interviewee (2-3 minutes): Note, this information should be used to tailor the set of questions below according to expertise. Not all questions will be relevant to all interviewees, and the focus of the interview protocol will need to reflect the background of the interviewee i.e., social value expertise, policy expertise.

A privacy notice was shared with participants in advance of consultations. This is presented in Appendix D.

Place-based teams in NRW that manage the WGWE (x5)

Questions	Answer
<ul style="list-style-type: none">• Each candidate to be sent short summary and info pack on project to date and key insights.• Brief intro to the interviewee	
<hr/> Current arrangement types <hr/>	
<p>What is your current knowledge and experience in engaging with community/third sector groups regarding the different asset transfer arrangements?</p>	
<ul style="list-style-type: none">• Purchasing of harvested timber• The right to harvest timber• Lease or loan arrangement (long or short-term, and how they perceive both)• Conditional<ul style="list-style-type: none">○ What might these conditions be?• Minimal conditions<ul style="list-style-type: none">○ What might these conditions be?• Conditional permanent transfer<ul style="list-style-type: none">○ What might these conditions be?• Minimal condition permanent transfer.<ul style="list-style-type: none">○ What might these conditions be?	
<hr/> <ul style="list-style-type: none">• Based on your experience of working with community/third sector groups to date, what benefits do you currently consider each asset transfer arrangement to unlock:<ul style="list-style-type: none">○ Purchasing of harvested timber○ The right to harvest timber○ Lease or loan arrangement (long or short-term, and how they perceive both)○ Conditional permanent transfer○ Minimal condition permanent transfer. <hr/>	

Asset transfer arrangement	Definition		Outcomes identified
Purchasing of harvested timber	Purchasing of harvested timber from NRW (roadside sales)		
The right to harvest timber	Standing sales, or part of a forest management plan.		
Lease or loan arrangement Short-term Long-term (~50 years)	Time-bounded management arrangement, may include or exclude right to harvest timber.	Conditional: Limited control of assets, or asset co-produced with beneficiary working with NRW to agree mutually-agreed objectives	
		Minimal conditions: Complete control of asset with minimal conditions placed i.e., on the extent or nature of asset use	
Permanent asset transfer Sale; Gifting	Permanent transfer or long-term lease (sale of asset or ~>50-year lease), may include or exclude the right to harvest timber.	Conditional: Limited control of assets, or asset co-produced with beneficiary working with NRW to agree mutually-agreed objectives	
		Minimal conditions: Complete	

		control of asset with minimal conditions placed i.e., on the extent or nature of asset use.	
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- What changes have you observed in recent years regarding where these proposals are coming from and the main drivers?

- What are the costs and risks associated with the different transfer arrangements to community groups in your experience?
 - Purchasing of harvested timber
 - The right to harvest timber
 - Lease or loan arrangement (long or short-term, and how they perceive both)
 - Conditional permanent transfer
 - Minimal condition permanent transfer.

Who are the main actors (in NRW) that decide which proposals are accepted? What information and process do they/have they used previously use to make/inform such decisions?

Benefits of woodland arrangements

- What sort of KPIs are you monitored against by NRW? Are these suitable for the purpose of woodland asset transfers?
- SVP to explain the themes of outcomes identified within the evidence review. Examples can be provided as part of the definition or as a prompt if required.
 - Environmental (e.g., flood risk, carbon sequestration, biodiversity)
 - Economic/financial: (e.g., employment, income streams, enterprise growth, tourism);
 - Social: (e.g., skills, training, access to green space);
 - Participatory; (e.g., volunteering, community empowerment, community capacity, social inclusion).
- Of the range of outcomes (will screenshare) of additional benefits that can be measured, which ones do you think most directly link to each type of arrangement? Suggest the pick their top 5 per arrangement.

In relation to any social, economic or environmental benefits realised through the different arrangement types, which do you consider to be additional?

How do you monitor the progress of community groups who have a formal agreement regarding ownership/management of a woodland space? Do they have to make any commitments as part of their ownership/management bid? How are deviations from agreements handled?

From the start of the business case process, how could NRW better support community groups to set targets against relevant additional benefits that are relevant to their group's aims? Start by taking us through your business case process.

Further information

What might the benefits or costs be of collecting more data relating to social, economic or environmental outcomes achieved as a result of asset transfer arrangements? What needs to be done in order to improve data collection in relation to monitoring additional benefits?

Any further comments that you feel will help inform how NRW measures the tangible benefits in relation to asset transfer of WGWE for communities or local enterprises?

Community groups in Wales (x5)

Questions

Answer

Brief intro to the interviewee, including them stating the type of asset (size), initial conditions pre-transfer and the type of arrangement they have and the characteristics of that agreement:

- Purchasing of harvested timber
 - The right to harvest timber
 - Lease or loan arrangement
 - Long or short-term (define length), and how they perceive both.
 - What are the conditions of your arrangement?
 - Conditional permanent transfer
 - What are the conditions?
 - Minimal condition permanent transfer.
 - What are the conditions?
-

The aims of the community group

What are your key objectives as an organisation?

What do you consider to be the benefits of your arrangement (thinking about the outcomes from our evidence review and anything else)?

- SVP to explain the themes of outcomes identified within the evidence review. Examples can be provided as part of the definition or as a prompt if required.
 - Environmental (e.g., flood risk, carbon sequestration, biodiversity)
 - Economic: (e.g., employment, income streams, enterprise growth, tourism);
 - Social: (e.g., skills, training, access to green space);
 - Participatory; (e.g., volunteering, community empowerment, community capacity, social inclusion).
- Across the range of outcomes, which ones do you think are delivered as a result of your transfer arrangement ?
- What about additional benefits above and beyond your group's core purpose, what do you think these are? They could be social, economic or environmental.
- If challenged, how confident would you be in the robustness of the evidence supporting these benefits being realised from your group's asset transfer arrangement?
- What is the scale of each of the additional benefits you have mentioned?

For each of the additional benefits described, how could they be measured? Do you measure them already and how comprehensively?

What are the barriers, if any, to meeting your objectives or intended outcomes, for example,

- Conditions of transfer
 - Duration of lease
 - Resources (for example, skills, knowledge, financial, volunteer time)
-

What sort of KPIs are you monitored against by NRW (or other stakeholder bodies, such as funders), if any, and how frequently?

How do you currently measure the additional social, economic or environmental benefits of your current arrangement with NRW, in relation to the original arrangement pre-transfer?

What barriers are there in relation to measuring and capturing data on social, environmental and economic benefits realised as a result of your arrangement?

Who do you hold yourselves accountable to [in achieving your goals] and how often do you feel your KPIs should be reported?

Costs and risks

- What are the costs that you face based on your current arrangement with NRW? Think about those beyond financial too.
 - What are the risks that you face based on your current arrangement with NRW? Think about those beyond financial too. To what extent were these considered pre-transfer.
 - Who is responsible for mitigating these costs and/or risks? To what extent have these materialised?
-

What do you consider to be additional costs resulting from your arrangement?

Further information

From the start of your process in agreeing your arrangement with NRW, could you have been better supported to set measurable additional benefits targets from the start of your inception and if so, how?

Any further comments that you feel will help inform how NRW measures the full range of benefits, costs and risks in relation to asset transfer of WGWE for communities or local enterprises?

Community groups from outside Wales (x2)

Questions**Answer**

Brief intro to the interviewee, including them stating the type of asset (size), initial conditions pre-transfer and the type of arrangement they have and the characteristics of that agreement:

- Purchasing of harvested timber
 - The right to harvest timber
 - Lease or loan arrangement (long or short-term, and how they perceive both)
 - What are the conditions of your arrangement?
 - Conditional permanent transfer
 - What are the conditions?
 - Minimal condition permanent transfer.
 - What are the conditions?
-

The aims of the community group

What are the core objectives of your organisation?

How do you currently engage with your Government's Woodland Estate or other woodland owners (e.g., Scottish National Forest Estate, Forestry England)? What role do you each take in the progress of your organisation?

What experience do you have in regard to the different types of transfer arrangement?

- Purchasing of harvested timber
 - The right to harvest timber
 - Lease or loan arrangement (long or short-term, and how they perceive both)
 - Conditional permanent transfer
 - Minimal condition permanent transfer.
-

Based on the arrangement you have experience of, what sort of arrangement in your opinion has the most positive impact on your organisation? How do you monitor these impacts?

What are the barriers, if any, to meeting your objectives or intended outcomes, for example,

- Conditions of transfer
 - Duration of lease
 - Resources (for example, skills, knowledge, financial, volunteer time)
-
- Thinking about different social, economic or environmental outcomes that can be measured, which ones do you think directly link to you as direct benefits you realise as a result of your arrangement.
 - If challenged, how confident would you be in the robustness of the evidence supporting these benefits being realised from your group's asset transfer arrangement?
 - Which ones do you feel you should be measured against? Have you measured such benefits previously?
-

Measuring and reporting the benefits

- As part of your inception, was there any qualifying criteria you had to meet in order to be suitable for further assessment?
 - How were you supported to set targets against additional social, economic or environmental outcomes that were relevant to your arrangement?
-

What sort of KPIs are you monitored against by your Government Woodland Estate, if any, and how frequently?

In your experience, what is the best way to monitor and collect data in order to measure the additional social, economic or environmental benefits of your operations from your arrangement, in relation to your goals? What can NRW learn from how you measure the additional benefits you experience? Do you think that the data that you collect supports/informs you in making best use of the assets?

What barriers are there in relation to measuring and capturing data on benefits through different arrangements?

Who do you hold yourselves accountable to [in achieving your goals] and how often do you feel your KPIs should be reported?

Further information

Any further comments that you feel will help inform how NRW assesses the benefits, costs and risks in relation to access to timber stock for communities or local enterprises?

Appendix D – Privacy Notice

English

Review of benefits, costs and risks of transferring management of woodland assets to third parties: Interviews

The Welsh Government has commissioned Steer Economic Development in consortia with Social Value Portal to undertake a review of the benefits, costs and risks of giving third parties, including community organisations, the opportunity to manage woodland, harvest and sell NRW timber stock. This review will also look to include recommendations for a practical assessment approach for NRW to use to robustly appraise applications to manage, harvest and sell woodland assets beyond their economic value.

As part of this research, an individual or group interview will be conducted with:

- NRW staff to provide insight into the current management of the Welsh Government's woodland estate
- Community groups in Wales and the UK

The Welsh Government is the data controller for the research. However, Steer Economic Development and Social Value Portal will delete any personal data provided during the interview and anonymise the transcripts, before it is shared with the Welsh Government.

The information collected during the project will be included in a report published on the Welsh Government website once the research is complete.

Your Participation in this research is completely voluntary. However your views and experiences are important in order to help inform the Welsh Government's review.

The contact for this research at Steer Economic Development is Victoria Johnson:

E-mail address: Victoria.Johnson@steergroup.com

PRIVACY NOTICE

What personal data do we hold and where do we get this information?

Personal data is defined under the UK General Data Protection Regulation (UK GDPR) as 'any information relating to an identifiable person who can be directly or indirectly identified by reference to an identifier'.

Steer Economic Development and Social Value Portal have your contact details (name, email and telephone number) for one of the following reasons:

- If you are a NRW staff member, your contact details were passed onto Steer Economic Development and Social Value Portal by the Welsh Government. The Welsh Government were given your details by NRW due to your ongoing work managing the Welsh Government Woodland Estate (WGWE), including overseeing timber sales.
- If you are a member of Llais y Goedwig or work on the Skyline project, you have given the Welsh Government permission to share your contact details for the purposes of this review. Your details have only been passed on to Steer Economic Development and Social Value Portal where you have agreed to this.
- If you are part of any other community group, your details have been passed on to Steer Economic Development and Social Value Portal by Llais y Goedwig. Your details have only been shared where you have agreed to this.

Steer Economic Development and Social Value Portal will only use your contact details for the purposes of this research project.

Your participation is voluntary and if you no longer wish to take part or receive reminders then please reply to the invitation email and you will no longer be contacted for this research.

There is no requirement to provide any additional personal data during interviews other than your image if you agree to a video recording of the interview. Interviews will be conducted via Microsoft Teams. The chat bar will be disabled during the interview. We wish to record interviews for operational reasons. We will make this clear to you before the interview, and you will have the opportunity to tell us if you are not happy for the discussion to be recorded. A group interview will only be recorded if all members of the group are happy for this to happen. If the interview is recorded, personal data will be removed during the process of transcribing. Recordings will be deleted as soon as this process is completed. If discussions

are not recorded, personal data will not be included in written notes prepared during or following the interviews.

If you raise a query or complaint and provide personal data requesting a response, the researcher will forward the request only to the relevant official and subsequently delete it from the research data.

What is the lawful basis for using your data?

The lawful basis for processing information in this data collection exercise is our public task; that is, exercising our official authority to undertake the core role and functions of the Welsh Government.

Participation is completely voluntary. Research studies such as this are important for the Welsh Government to identify ways that social, economic and environmental benefits can be assessed and delivered. The information collected in this research, for example, might be used to support NRW, an arms-length body of the Welsh Government, to assess applications to manage, harvest and sell assets from the WGWE beyond its economic value.

How secure is your personal data?

Personal information provided to Steer Economic Development and Social Value Portal is always stored on a secure server. The data can only be accessed by a limited number of researchers working on this project. Steer Economic Development and Social Value Portal will only use this data for research purposes. Steer Economic Development and Social Value Portal have cyber essentials certification.

Steer Economic Development and Social Value Portal has procedures to deal with any suspected data security breaches. If a suspected breach occurs, Steer Economic Development and Social Value Portal will report this to the Welsh Government who will notify you and any applicable regulator where we are legally required to do so.

Steer Economic Development and Social Value Portal will use the information gathered to produce a report that will be published on the Welsh Government website. This report will not include any information that could be used to identify individual participants.

How long do we keep your personal data?

Steer Economic Development and Social Value Portal will hold personal data during the contract period, and any personal data not already removed during data collection will be deleted by Steer Economic Development and Social Value Portal three months after the end of the contract. This includes your contact details.

Steer Economic Development and Social Value Portal will provide Welsh Government with an anonymised version of the data which will not include information that could identify you.

Individual rights

Under UK GDPR, you have the following rights in relation to the personal information you provide as part of this research, you have the right:

- To access a copy of your own data;
- For us to rectify inaccuracies in that data;
- To object to or restrict processing (in certain circumstances);
- For your data to be 'erased' (in certain circumstances); and
- To lodge a complaint with the Information Commissioner's Office (ICO) who is our independent regulator for data protection.

If you have any concerns about how your data has been handled, you can lodge a complaint with the Information Commissioner's Office who is the independent regulator for data protection. You can contact the Information Commissioner's Office on 01625 545 745 or 0303 123 1113, via the website www.ico.gov.uk, or write to: Information Commissioner, Wycliffe House, Water Lane, Wilmslow, Cheshire, SK9 5AF.

Further Information

If you have any further questions about how the data provided as part of this study, will be used by the Welsh Government or wish to exercise your rights using the UK General Data Protection Regulation, please contact:

Aimee Marks

Aimee.Marks@gov.wales

The Welsh Government's Data Protection Officer can be contacted at: Welsh Government, Cathays Park, Cardiff, CF10 3NQ,

Email: DataProtectionOfficer@gov.wales.

Cymraeg

Adolygiad o fanteision, costau a risgiau trosglwyddo'r gwaith o reoli asedau coetiroedd i drydydd partïon: Cyfweiliadau

Mae Llywodraeth Cymru wedi comisiynu Steer Economic Development mewn consortia gyda'r Social Value Portal i gynnal adolygiad o fanteision, costau a risgiau rhoi cyfle i drydydd partïon, gan gynnwys sefydliadau cymunedol, rheoli coetiroedd, cynaeafu a gwerthu stoc pren CNC. Bydd yr adolygiad hwn hefyd yn ceisio cynnwys argymhellion ar gyfer dull asesu ymarferol i CNC ei ddefnyddio i arfarnu ceisiadau'n gadarn i reoli, cynaeafu a gwerthu asedau coetir y tu hwnt i'w gwerth economaidd.

Fel rhan o'r ymchwil hon, cynhelir cyfweiliad unigol neu grŵp gyda:

- Staff CNC i roi cipolwg ar reolaeth bresennol ystâd goetir Llywodraeth Cymru
- Grwpiau cymunedol yng Nghymru a'r DU

Llywodraeth Cymru yw rheolydd data'r ymchwil. Fodd bynnag, bydd Steer Economic Development a'r Social Value Portal yn dileu unrhyw ddata personol a ddarparwyd yn ystod y cyfweiliad ac yn gwneud y trawsgrifiadau'n ddienw, cyn ei rannu â Llywodraeth Cymru.

Bydd yr wybodaeth a gesglir yn ystod y prosiect yn cael ei chynnwys mewn adroddiad a gyhoeddir ar wefan Llywodraeth Cymru unwaith y bydd yr ymchwil wedi'i chwblhau.

Mae eich cyfranogiad yn yr ymchwil hwn yn gwbl wirfoddol. Fodd bynnag, mae eich barn a'ch profiadau yn bwysig er mwyn helpu i lywio adolygiad Llywodraeth Cymru.

Victoria Johnson yw'r cyswllt ar gyfer yr ymchwil hwn yn Steer Economic Development:

Cyfeiriad e-bost: Victoria.Johnson@steergroup.com

HYSBYSIAD PREIFATRUYDD

Pa ddata personol sydd gennym a ble rydym yn cael yr wybodaeth hon?

Diffinnir data personol o dan Reoliad Diogelu Data Cyffredinol y DU (GDPR y DU) fel 'unrhyw wybodaeth sy'n ymwneud â pherson adnabyddadwy y gellir ei adnabod yn uniongyrchol neu'n anuniongyrchol drwy gyfeirio at ddynodydd'.

Mae gan y Porth Datblygu Economaidd a Gwerth Cymdeithasol eich manylion cyswllt (enw, e-bost a rhif ffôn) am un o'r rhesymau canlynol:

- Os ydych yn aelod o staff Cyfoeth Naturiol Cymru, trosglwyddwyd eich manylion cyswllt i'r Steer Economic Development and Social Value Portal gan Lywodraeth Cymru. Rhoddwyd eich manylion i Lywodraeth Cymru gan CNC oherwydd eich gwaith parhaus yn rheoli Ystâd Coetir Llywodraeth Cymru, gan gynnwys goruchwyllo gwerthiant coed.
- Os ydych yn aelod o Llais y Goedwig neu'n gweithio ar brosiect Skyline, rydych wedi rhoi caniatâd i Lywodraeth Cymru rannu eich manylion cyswllt at ddibenion yr adolygiad hwn. Dim ond pan fyddwch wedi cytuno i hyn y caiff eich manylion eu trosglwyddo i'r Steer Economic Development a'r Social Value Portal.
- Os ydych yn rhan o unrhyw grŵp cymunedol arall, mae eich manylion wedi'u trosglwyddo i Steer Economic Development a'r Social Value Portal gan Llais y Goedwig. Dim ond pan fyddwch wedi cytuno i hyn y caiff eich manylion eu rhannu.

Bydd Steer Economic Development a'r Social Value Portal ond yn defnyddio'ch manylion cyswllt at ddibenion y prosiect ymchwil hwn.

Mae eich cyfranogiad yn wirfoddol ac os nad ydych yn dymuno cymryd rhan mwyach neu dderbyn nodiadau atgoffa, atebwch yr e-bost gwahoddiad ac ni fyddwn yn cysylltu â chi ar gyfer yr ymchwil hwn mwyach.

Nid oes gofyniad i ddarparu unrhyw ddata personol ychwanegol yn ystod cyfweiliadau ar wahân i'ch delwedd os ydych yn cytuno i recordiad fideo o'r cyfweiliad. Cynhelir cyfweiliadau drwy Microsoft Teams. Bydd y bar sgwrsio wedi'i analluogi yn ystod y cyfweiliad. Hoffem gofnodi cyfweiliadau am resymau gweithredol. Byddwn yn gwneud hyn yn glir i chi cyn y cyfweiliad, a chewch gyfle i ddweud wrthym os nad ydych yn hapus i'r drafodaeth gael ei chofnodi. Dim ond os yw holl aelodau'r grŵp yn hapus i hyn ddigwydd y bydd cyfweiliad grŵp yn cael ei gofnodi. Os caiff y cyfweiliad ei gofnodi, bydd data personol yn cael ei ddileu yn ystod y broses o drawsgrifio. Caiff recordiadau eu dileu cyn gynted ag y bydd y broses hon wedi'i chwblhau. Os na chaiff trafodaethau eu cofnodi, ni fydd data personol yn cael ei gynnwys mewn nodiadau ysgrifenedig a baratowyd yn ystod neu ar ôl y cyfweiliadau.

Os byddwch yn codi ymholiad neu gŵyn ac yn darparu data personol yn gofyn am ymateb, bydd yr ymchwilydd yn anfon y cais yn ôl at y swyddog perthnasol yn unig ac wedyn yn ei ddileu o'r data ymchwil.

Beth yw'r sail gyfreithlon dros ddefnyddio'ch data?

Y sail gyfreithlon dros brosesu gwybodaeth yn yr ymarfer casglu data hwn yw ein tasg gyhoeddus; hynny yw, arfer ein hawdurdod swyddogol i ymgymryd â rôl a swyddogaethau craidd Llywodraeth Cymru.

Mae cyfranogiad yn gwbl wirfoddol. Mae astudiaethau ymchwil fel hyn yn bwysig i Lywodraeth Cymru nodi ffyrdd y gellir asesu a chyflawni manteision cymdeithasol, economaidd ac amgylcheddol. Gellid defnyddio'r wybodaeth a gesglir yn yr ymchwil hwn, er enghraifft, i gefnogi CNC, corff hyd braich o Lywodraeth Cymru, i asesu ceisiadau i reoli, cynaeafu a gwerthu asedau o Ystâd Coetir Llywodraeth Cymru y tu hwnt i'w werth economaidd.

Pa mor ddiogel yw eich data personol?

Mae gwybodaeth bersonol a ddarperir i Steer Economic Development a'r Porth Gwerth Cymdeithasol bob amser yn cael ei storio ar weinydd diogel. Dim ond nifer cyfyngedig o ymchwilyddyr sy'n gweithio ar y prosiect hwn all gael gafael ar y data. Bydd Steer Economic Development a'r Social Value Portal ond yn defnyddio'r data hwn at ddibenion ymchwil. Mae gan Steer Economic Development a'r Porth Gwerth Cymdeithasol ardystiad hanfodion seiber.

Mae gan Steer Economic Development a'r Social Value Portal weithdrefnau i ddelio ag unrhyw achosion tybiedig o dorri amodau diogelwch data. Os bydd amheuaeth o dorri'r rheolau, bydd Steer Economic Development a'r Social Value Portal yn rhoi gwybod i Lywodraeth Cymru am hyn a fydd yn eich hysbysu chi ac unrhyw reoleiddiwr perthnasol lle mae'n ofynnol yn gyfreithiol i ni wneud hynny.

Bydd Steer Economic Development a'r Social Value Portal yn defnyddio'r wybodaeth a gesglir i gynhyrchu adroddiad a fydd yn cael ei gyhoeddi ar wefan Llywodraeth Cymru. Ni fydd yr adroddiad hwn yn cynnwys unrhyw wybodaeth y gellid ei defnyddio i nodi cyfranogwyr unigol.

Am ba hyd y byddwn yn cadw eich data personol?

Bydd Steer Economic Development a'r Social Value Portal yn cadw data personol yn ystod cyfnod y contract, a bydd unrhyw ddata personol nad yw eisoes wedi'i dynnu wrth gasglu data yn cael ei ddileu gan Steer Economic Development a'r Social Value Portal dri mis ar ôl diwedd y contract. Mae hyn yn cynnwys eich manylion cyswllt.

Bydd Porth Llywio Datblygu Economaidd a Gwerth Cymdeithasol yn rhoi fersiwn ddiennw o'r data i Lywodraeth Cymru na fydd yn cynnwys gwybodaeth a allai eich adnabod.

Hawliau unigolion

O dan GDPR y DU, mae gennych yr hawliau canlynol mewn perthynas â'r wybodaeth bersonol a ddarperir gennych fel rhan o'r ymchwil hon, mae gennych yr hawl:

- I gael gafael ar gopi o'ch data eich hun;
- I ni gywiro gwallau yn y data hwnnw;
- Gwrthwynebu neu gyfyngu ar brosesu (mewn rhai amgylchiadau);
- I'ch data gael ei 'ddileu' (mewn rhai amgylchiadau); a
- Cyflwyno cwyn i Swyddfa'r Comisiynydd Gwybodaeth (ICO) sef ein rheoleiddiwr annibynnol ar gyfer diogelu data.

Os oes gennych unrhyw bryderon ynghylch sut yr ymdriniwyd â'ch data, gallwch gyflwyno cwyn i Swyddfa'r Comisiynydd Gwybodaeth, sef y rheoleiddiwr annibynnol ar gyfer diogelu data. Gallwch gysylltu â Swyddfa'r Comisiynydd Gwybodaeth ar 01625 545 745 neu 0303 123 1113, drwy wefan www.ico.gov.uk, neu ysgrifennu at: Comisiynydd Gwybodaeth, Wycliffe House, Water Lane, Wilmslow, Cheshire, SK9 5AF.

Rhagor o Wybodaeth

Os oes gennych unrhyw gwestiynau pellach am sut y bydd y data a ddarperir fel rhan o'r astudiaeth hon yn cael ei ddefnyddio gan Lywodraeth Cymru neu os hoffech arfer eich hawliau gan ddefnyddio Rheoliad Diogelu Data Cyffredinol y DU, cysylltwch â:

Aimee Marks

Aimee.Marks@gov.cymru

Gellir cysylltu â Swyddog Diogelu Data Llywodraeth Cymru yn: Llywodraeth Cymru, Parc Cathays, Caerdydd, CF10 3NQ,

E-bost: DataProtectionOfficer@gov.cymru

Appendix E - Summary of Evidence Review

Note: + indicates a positive impact, - indicates a risk/cost

Potential Outcome	Description	Evidence quality	Reference
Biophysical			
Adoption of LISS and innovative silviculture practices	<p>+ Community Woodland Groups (CWG) management can reduce the cost of woodland management, utilise innovative silviculture techniques and adopt Low Impact Silviculture Systems (LISS) as they are often not driven by commercial goals.</p> <p>- Priorities may conflict with those of NRW. Most CWG do not prioritise productive woodland management. This contrasts within almost all European countries where productive woodland management is prioritised.</p> <p>- CWG may lack the skills, knowledge, and resources to practice LISS and require support from NRW or knowledge networks/ intermediaries</p>	Limited evidence. UK studies tend to focus on objectives of CWG rather than outcomes achieved. Wong et al. (2015) highlight the importance of intermediaries for supporting CWG to provide guidance, advice, and training.	Urqhart (2006); Stewart (2011); Lawrence and Molteno (2012); Lawrence et al., (2014), Wong et al., (2015); Dunn et al, (2021).
Increased woodland management, conservation and improvement	<p>+ Reducing un(der) managed woodlands can increase woodland quality, increase the amenity value, and encourage use, with improved public perception of the woodlands/ local environment.</p> <p>- CWG and Woodland Social Enterprises (WSE) may lack the skills, knowledge, and resources to practice LISS.</p> <p>- Overuse by visitors can undermine conservation activities.</p> <p>- Improvements to woodlands, particularly within urban and peri-urban settings can increase the value (and price) of housing, with potential distributional impacts.</p>	Moderate evidence: Public perception surveys suggest that CWG management increases woodland quality (e.g., Lawrence and Ambrose-Oji, 2014). Most UK studies focus on objectives of CWG rather than outcomes achieved, however, more robust evaluations involving public perception surveys have been undertaken in Scotland. Success is often dependent on access to knowledge sharing networks including intermediaries and extent to which power is devolved amongst the community. Limited evidence for negative impacts such as overuse and distributional impacts of improved woodland quality.	Charnley and Poe (2007); Owen et al., (2008); Stewart (2011); Lawrence and Ambrose-Oji (2014); Wong et al., (2015); Barlagne et al., (2021).
Increased biodiversity	+ Improvements to genetic diversity (e.g., planting of indigenous species), habitat enhancement and creation, LISS.	Limited evidence. UK studies tend to focus on objectives of CWG rather than outcomes achieved. A systematic review of global data implies that there is little or no evidence of improvements across a range of biophysical indicators (Bowler et al., 2012). Global studies have identified that improvement across a range of biophysical indicators is dependent on a number of factors including well defined property rights, effective institutional arrangements and community interests and incentives (Padgee et al., 2006; Charnley and Poe, 2007).	Charnley and Poe (2007); Bowler et al., (2012); Ambrose-Oji et al., (2012); Wong et al., (2015); Sarkki, et al., (2019); Barlagne et al., (2021).
Woodland resilience	+ Improvements to genetic diversity, regulating pests and diseases through planting and control activities, ecological monitoring, and reporting.		Padgee et al., (2006); Charnley and Poe (2007); Egunyru et al., (2016); Ludvig et al., (2018); Dunn et al., (2021).
Carbon storage and sequestration	<p>+ Woodland expansion (if well managed), shifting from clear-fell to LISS.</p> <p>- Some evidence to suggest that increased management of undermanaged woodland may reduce carbon sequestration potential through soil disturbance or increased harvesting.</p>	Limited evidence. Limited/ indirect evidence for improvements in carbon storage or sequestration in relation to transfer of ownership. Partly due to issues of additionality and attribution (Krug, 2019; Ambrose-Oji et al., 2012) and lack of longitudinal data. However, if un(der) managed woodlands were managed with ecologically motivated methods, there could be long-term benefits (e.g., Sing et al., 2018; Krug, 2019).	Ambrose-Oji et al., (2012); Sing et al., (2018); Krug (2019) Dunn et al., (2021).
Economic and financial			

Potential Outcome	Description	Evidence quality	Reference
Local employment	+ Local employment creation/ safeguarding employment.	Limited evidence. Schemes are often motivated to create local employment, but evidence is mixed and contradictory particularly in relation to quality and sustainability of employment opportunities.	Owen et al., (2008); Lawrence and Ambrose-Oji (2014); Wong et al., (2017); Barlagne et al., (2021); Dunn et al., (2021), Siegner et al., (2021).
Enterprise growth	+ Sale of a range of goods and services (timber, firewood, NTFP, social services, contracted woodland management, training, rental of premises, community renewable energy schemes) can facilitate wealth generation and move away from grant dependency. + Enterprise growth has the potential to increase local prosperity, with some European studies identifying this also has the potential to counter emigration from rural areas, increase attractiveness of regions. - Difficulties of generating income due to the need for capital investment, competition, markets and access to markets, highlighting the benefits associated with selling at scale.	Moderate evidence. In England, WSE have not contributed to economic growth envisaged by policy goals (Lawrence et al., 2020). Few Welsh WSE are self-sufficient financially (Wong, 2017). Impacts will vary depending on the focus of the CWG and WSE. Global studies (e.g., including Europe and North America) indicate that community woodland enterprises (including social enterprises) where communities control timber harvesting, and processing have created employment and generated income for the locale. Sector specific intermediaries, capital investment, markets and market access, quality of woodland and devolved powers are important success factors (Lawrence et al., 2020; Wong et al., 2015; Charnley and Poe,2007).	Charnley and Poe (2007); Stewart (2011); Ambrose-Oji et al., (2012); Wong et al., (2015); Weiss et al., (2017); Wong (2017); Barlagne et al., (2021), Siegner et al., (2021).
Tourism	+ Activities of CWGs could lead to an increase in visitors to the woodlands they manage, however, this is rarely evidenced. + An increase in visitors may lead to positive impacts on the local economy. - Overuse by visitors can undermine conservation activities.	Limited evidence. There is limited empirical evidence for changes in visitor numbers, and even less evidence for how far visitors travel. Increases in footfall are often due to increased local use. The international literature (e.g., Europe and North America), however, does imply that community forestry can lead to high-quality nature-based tourism, with positive impacts on the local economy, adding weight to the evidence base on this area, in the face of the weaker forms of evidence in the UK context.	Owen et al., (2008); Wong (2017); Sarkki, et al.,(2019).
Social			
Environmental education	+ Increased understanding of local environment and nature; increased attendance to events with educational and learning theme	Moderate evidence: Evidence that CWG and WSE carry out these activities is widespread, but measures are output focussed. Evidence is primarily from formal evaluations, perceived benefits of community woodland groups and in-depth small-n case studies. The extent to which these impacts are realised are dependent on the objectives of the CWG/WSE and their proximity to residential areas (Tzoulas et al., 2010). There is also limited evidence of the extent of additional benefits resulting from the asset transfer.	Owen et al., (2008); Wong (2017).
Training in forest management	+ Local people trained to practice alternatives to industrial forest management.		Ambrose et al., (2015).
Recreation	+ Increase in recreational use (e.g., physical exercise, informal play). + Leasing of premises to third parties can increase recreational facilities within woodland, and support revenue generation of community woodland group.		Owen et al., (2008); Lawrence and Ambrose-Oji (2014); Sarkki, et al., 2019; Barlagne et al., (2021).
Access	+ Creation of infrastructure (paths/tracks); increase in access points and maintenance of infrastructure. - Often high cost of maintenance to community woodland groups. - Overuse by visitors can undermine conservation activities.		Owen et al., (2008); Lawrence and Ambrose-Oji (2014); Wong (2017), Barlagne et al., (2021).
Education and training	- Curriculum enhancement activities; work-related skills training (apprenticeships, work experience)		Blundel and Lyon (2015); Wong (2017); Sarkki, et al., 2019; Barlagne et al., (2021).

Potential Outcome	Description	Evidence quality	Reference
Community quality of life	+ Improvements in quality of life for the community; reduction in anti-social behaviour around woodlands; sense of place.		Owen et al., (2008); Lawrence, et al., (2009); Lawrence and Ambrose-Oji (2014); Wong (2017); Sarkki et al., (2019); Barlagne et al.,(2021).
Individual health and wellbeing	+ Increased recreational use of woodlands (e.g., physical exercise, informal play). - Overuse by visitors can undermine conservation activities.	Strong evidence: There is strong evidence for the health-related benefits (physical and mental health outcomes) of increasing access to woodland specifically and greenspaces more broadly from formal evaluations and evidence from systematic reviews.	Owen et al., (2008); Lawrence and Ambrose-Oji (2014); Wong (2017); Christie et al., (2017); Ridgley et al., (2020); Barlagne et al., (2021); Nguyen et al., (2021), Saraev et al. (2020, 2021).
Participation			
Social inclusion	+ CWG and WSE can potentially deliver local services at lower costs (especially in deprived areas) as they may not need generate a profit. + Employment opportunities (training, work experience, local employment). + Increased access by people from deprived areas. + Economic development by creating more enterprising communities and attracting new people to business. - Evidence that improved amenity value can have a negative impact on social inclusion by increasing the cost of housing. - Unrepresentative group members may not prioritise local needs.	Limited evidence: Multiple case studies suggest CWG and WSE can deliver services to local communities, however, there is little evaluative evidence of outputs and outcomes. Data is contradictory in relation to employment and limited with respect to economic development. WSE are likely to have a more significant impact, as social inclusion is often an explicit priority, with revenues reinvested to support these activities. Several evaluations have illustrated that CWG can lead to increased access of people from deprived areas. However, there is large body of literature in the UK and internationally that implies the main decisionmakers within CWG tend to be unrepresentative of the wider community. The extent to which social inclusion is achieved through asset transfer will be dependent on the objectives of the CWG/WSE, including a specific objective to target the inclusion of marginalised groups.	Charnley and Poe (2007); McDermott (2009); Lawrence (2011); Lawrence and Molteno (2012); Ambrose-Oji et al., (2013); Lawrence and Ambrose-Oji (2014), Wong (2017).
Community empowerment	+ Devolution of power to meet local needs, or effective mechanism for involving citizens in decision making.	Limited evidence: The lack of longitudinal data means that sustainability of participation within CWG over time is not widely demonstrated. Additionally, participation can range from consultation in relation to woodland management plans to full control of a woodland asset. The extent of community empowerment is, therefore, strongly linked to level of decentralisation and devolution of power, rights, and responsibilities (Lawrence et al., 2020; Lawrence and Molteno, 2012; Charnley and Poe,2007; Padgee et al., 2006;).	Campbell and Bryan (2006); Owen et al., (2008); Lawrence et al., (2009); Edwards (2009); Tidey and Pollard (2010); Lawrence and Ambrose-Oji (2014); Barlagne et al., (2021).
Community capacity	+ The ability of a community to adapt to economic, social, political, environmental change both in terms of threats and opportunities to ensure community members maintain or enhance their quality of life.	Moderate evidence. Although rarely an explicit goal of CWG and WSE, several evaluative studies highlighted this impact. Definitions of community capacity are varied, however, and include the strength of relationships between public sector organisations and communities, social network building (social capital), and development of skills and knowledge. Intermediaries are identified as key determinants of community capacity building. The wider literature on community asset transfers adds weight to the potential impacts (e.g., community centres and village halls), see for example Coates et al. (2021).	Padgee et al., (2006); Charnley and Poe (2007); Owen et al., (2008); Edwards et al., (2009); Lawrence and Ambrose-Oji et al., (2014); Dunn et al., (2021).

Potential Outcome	Description	Evidence quality	Reference
Social capital	+ Social capital can be strengthened by encouraging community ownership and management of assets.	Moderate evidence. Limited evidence for woodland asset transfer, but the wider literature on community asset transfers adds weight to the potential impacts. The literature, however, does not consider negative impacts within this domain.	Owen et al., (2008); Lawrence et al., (2009); Edwards (2009); Stewart (2011); Lawrence and Ambrose-Oji (2014); Sarkki, et al., (2019); Barlagne et al., (2021)
Volunteering	+ Increased opportunities for volunteering. - Many CWG report difficulties in sustaining and recruiting volunteers requiring either a shift in business model or a focus on activities that require lower numbers of volunteers.	Strong evidence: Many CWG and WSE are dependent on volunteering to deliver activities and objectives. Evaluations have tended to focus on outputs (e.g., volunteer numbers). There is, however, a large body of literature that suggests a positive relationship between volunteering and improved measures of mental and physical wellbeing (McGarvey et al., 2019, Stuart et al., 2021) particularly for people from lower socio-economic groups, unemployed, people with chronic health conditions, people with lower levels of wellbeing, older adults and those transitioning from work to retirement (Russell et al., 2019, Stuart et al., 2021).	Owen et al., (2008); Lawrence and Ambrose-Oji (2014); Wong (2017); Ludvig et al., (2018); Barlagne et al., (2021).

Appendix F – High-level Review of Valuation sources/ Appraisal Frameworks considered

Sources falling within central Government Green Book and supplementary guidance

Impact Group	Valuation sources/ Appraisal Framework	Description	Pros	Cons
Cross-cutting	HM Treasury Green Book: Central Government Guidance on Appraisal and Evaluation	The Green Book is guidance issued by HM Treasury on how to appraise policies, programmes and projects. It also provides guidance on the design and use of monitoring and evaluation before, during and after implementation. Table 3 in Appendix A1 provides a range of environmental values.	<ul style="list-style-type: none"> Well-recognised and understood within the UK and across industry. Indicator quantification and monetisation is straightforward for the benefits explained within the Green Book itself (i.e., not supplementary guidance) 	<ul style="list-style-type: none"> Green Book specific guidance focuses on quantifying and monetising economic and financial benefits. For the wider benefits which will largely result from Woodland intervention activities, guidance (found in the supplementary sections) and benefit calculation can be complex.
Cross-cutting	TAG (Transport Analysis Guidance) Databook and accompanying guidance	A Databook and series of accompanying appraisal guidance documents and tools published by the Department for Transport. The Databook provides a range of relevant valuations including values related to time, air quality, GHG emissions (BEIS non-traded carbon value), cycling and walking. The Active Mode Appraisal Toolkit (AMAT) may be useful for community woodland groups planning on implementing footpaths and cycleways.	<ul style="list-style-type: none"> A cross-cutting source of robust valuations used for policy making. Some TAG tools are automated and only require the input amounts. Aligned to HM Treasury Green Book and widely used for BCA. 	<ul style="list-style-type: none"> Some tools do require guidance or past experience to be able to use them to their fullest potential. If professional consultancy estimates (for demand) are not available, then broad assumptions may be required

Cross-cutting	Woodland Valuation Tool (2018)	Developed by the University of Exeter and commissioned by the Forestry Commission, this tool lists woodland specific outcome valuation methods and values from academic and non-academic research, with a value look-up table for a range of impact areas. Some cross-over with ENCA.	<ul style="list-style-type: none"> Designed to inform forest management across the UK. Includes peer reviewed and published valuation research. 	<ul style="list-style-type: none"> Will require significant effort to be able to understand each valuation method fully to see if it is correct for the appraisal in question. Does not provide guidance on quality of valuation. A number of valuations are aggregated at the national level and may not be relevant for local scale project appraisal.
Biophysical	ENCA, including ENCA services Databook, ENCA assets Databook	Published by DEFRA, ENCA is a set of data, guidance and valuation tools developed by the UK Government to take natural capital ³¹ into account within policy appraisal. It is recommended for use by HM Treasury Green Book and is supplementary guidance to the Green Book.	<ul style="list-style-type: none"> Specific to UK contexts Includes peer reviewed and published valuation research. Provide summaries on sources, methodologies, and guidance for use. 	<ul style="list-style-type: none"> A selection of data and valuation tools, but still requires some user selection to choose a valuation methodology and conduct the analysis. Does not prescribe 'best practice' or 'standardised' valuations.
Biophysical	BEIS (2021) Valuation of greenhouse gas emissions: for policy appraisal and evaluation	Sets out the approach to valuing greenhouse gas emissions in policy appraisal, following a cross-government review during 2020 and 2021. A full table of values with low, central and high estimates are provided up to 2050.	<ul style="list-style-type: none"> Ready reckoner values which are easy to find and use. World bank and Intergovernmental Panel on Climate Change (IPCC) data considered within these values. 	<ul style="list-style-type: none"> Requires carbon emissions to be estimated. Primary intended user is industry
Biophysical	Defra's Biodiversity Metric 3.1	Biodiversity Metric 3.1 is a biodiversity accounting tool that can be used for the purposes of calculating biodiversity net gain. It converts habitats into 'biodiversity units' to assist in improving land management	<ul style="list-style-type: none"> Can be used to develop a baseline and forecast outcomes from an intervention using habitats as a proxy for biodiversity. 	<ul style="list-style-type: none"> Primarily designed for ecologists, planners and developers to quantify losses or gains in biodiversity value

³¹ Natural Capital is defined by the HM Treasury Green Book as including, "certain stocks of the elements of nature that have value to society, such as forests, fisheries, rivers, biodiversity, land and minerals. Natural capital includes both the living and non-living aspects of ecosystems."

		<p>outcomes as well as compensating for biodiversity loss when development causes a loss of habitat. It is intended to underpin the Environment Bill's provisions for mandatory biodiversity % gain.</p>		<p>brought about by developments or changes in land management.</p> <ul style="list-style-type: none"> • The habitat proxy is considered to undervalue some habitats, including re-wilding projects. • Does not capture the connectivity of areas. • Currently no agreed valuation for a biodiversity unit. • Requires ecological expertise and is potentially resource intensive to complete.
Biophysical	The Woodland Carbon Code	<p>The Provides conversion factors to calculate the carbon reduction impacts from woodland management activities (per ha/ per tree), and valuations for planting and establishment costs for a range of woodland types.</p>	<ul style="list-style-type: none"> • Specific to UK contexts. • Intended users are woodland management projects. • Granular inputs taken into consideration (for example, type of woodland) 	<ul style="list-style-type: none"> • Primarily developed for landowners to estimate the costs of woodland creation and expansion and sale of carbon credits on the voluntary carbon market.
Biophysical	Natural Environment Valuation Online Tool (NEVO)	<p>NEVO allows users to consider how the flow of ecosystem services would change if they were to alter the land use or agricultural prices in the area.</p>	<ul style="list-style-type: none"> • Takes regional differences (and assumptions) into account. • Perfect to use for land cover type changes. • Easy to see impact area (on a map). • Carbon sequestration estimates are calculated. 	<ul style="list-style-type: none"> • Some training time required to understand and become proficient at using the NEVO online user interface correctly and to its fullest potential. • Woodland is editable as just one category (whilst broadleaf and coniferous coverage is provided these cannot be altered to see impact effects).

				<ul style="list-style-type: none"> • “2km square” areas are the most granular area levels.
Biophysical	Green Infrastructure Valuation (GI-Val)	A set of calculator tools to assess the value of a green asset or a proposed green investment. Some biodiversity values captured in ENCA Services Databook, other values used within formal evaluations (e.g., Ambrose-Oji et al., 2012)	<ul style="list-style-type: none"> • Little inputs required, but benefit values split over 11 categories. • Easy to see where the benefit values can be attributed, lots of granular benefits measured 	<ul style="list-style-type: none"> • Biodiversity and land management benefits are calculated quite broadly (i.e., cannot find the benefits from changing woodland type).
Biophysical	i-Tree	A set of tools drawing on peer-reviewed literature that enables the estimation of a range of woodland and individual tree benefits and management costs in urban and rural contexts. Benefits considered include carbon sequestration, flood alleviation and improvements to air quality. Developed by the USDA Forest Service. Valuations presented in USD.	<ul style="list-style-type: none"> • Used widely internationally for assessing and managing forests and community trees. • Free to access with a range of download options and wide range of resources and guidance. • i-Tree provides baseline data that can be used to demonstrate value and set priorities. • Assumptions, sources and limitations well documented. • i-Tree Eco developed by Forest Research has developed the i-Tree tools for use in the UK, although the focus has predominately been on urban trees. 	<ul style="list-style-type: none"> • Monetary values are provided, although these are only partly consistent with Government guidance.
Social	Wellbeing Guidance for Appraisal: Supplementary	This guidance explains where, when and how wellbeing concepts, measurement and estimation may contribute to the appraisal of social, or public value in Green Book appraisal. In doing so it provides guidance on how to	<ul style="list-style-type: none"> • UK Governmental guidance published as supplementary guidance to the Green Book. • Appendix 2 provides details for quantifying and monetising wellbeing 	<ul style="list-style-type: none"> • Subjective wellbeing has been widely used with social value appraisal but is still widely critiqued.

	Green Book Guidance	monetise wellbeing costs and benefits – wellbeing includes Life satisfaction, Worthwhile, Happiness, and (lack of) anxiety.	effects, including a table of potential values for appraisal.
Social	Outdoor Recreation Valuation Tool (ORVal: Version 2.0)	ORVal is a web-based tool that predicts the number of visits to existing and new greenspaces in England and Wales and estimates the welfare value of those visits in monetary terms. It has been developed by the University of Exeter with funding from Defra.	<ul style="list-style-type: none"> • Referenced within the HM Treasury Green Book. • Provides an estimate of the recreational value of existing green space and models the change in visits and recreational value if the land cover was changed, or new green spaces created. • Considers features of the location, and accounts for the availability of other greenspace and characteristics of the local population. <ul style="list-style-type: none"> • Values and visit estimates are derived from a model, rather than actual counts of visits to a particular greenspace or actual measures of welfare. • Users cannot add or change the values or figures used in the tool and access is restricted to this interface only rather than to the underlying model.

Source: Steer ED, 2022

Sources outside the scope of central Government Green Book and supplementary guidance:

Cross-cutting	Greater Manchester Combined Authority Unit Cost Database (2019)	Provides a circa 800 monetised estimates of fiscal, economic and social value for a range of interventions, including crime, education and skills, employment and economy.	<ul style="list-style-type: none"> • Costs are drawn from national sources including government reports and academic research. • Guidance is provided on using unit costs within appraisal. 	<ul style="list-style-type: none"> • Has not been updated since 2019, with annual updates currently paused. • Does require guidance or past experience to be able to use them to their fullest potential.
Cross-cutting	National TOMs Wales	The National TOMs Wales incorporates community benefits details and measurements and has been designed to allow organisations to assess their social value contribution in terms of non-financial benefits (e.g., jobs for long term	<ul style="list-style-type: none"> • Benefit values are drawn from national sources including government reports and academic research. 	<ul style="list-style-type: none"> • Primarily used when public organisations are buying services (to encourage private organisations to increase social impacts).

		unemployed) and the additional financial value created (e.g., additional fiscal and economic benefits).	<ul style="list-style-type: none"> • Guidance is provided on using unit costs within appraisal. • Widely used within public sector procurement. 	<ul style="list-style-type: none"> • Methodologies for monetisation do not always meet HM Green Book standards. • Limited environmental metrics and valuations.
Cross-cutting	Community Empowerment (Scotland) Act – asset transfers: social value guidance	Guidance on calculating Best Value in relation to Part 5 of the Community Empowerment Act (Scotland) that introduced the right for community bodies to make requests to all local authorities, Scottish Ministers and a range of public bodies for any land or buildings they feel they could make better use of. They can request ownership, lease or other rights as they wish.	<ul style="list-style-type: none"> • Comprehensive guidance on calculating Best Value against Seven Best Value Themes (Economic Development, Regeneration, Public Health, Social Wellbeing, Environmental Wellbeing and Reducing Inequalities). • Guidance has been used in practice for circa 5 years. 	<ul style="list-style-type: none"> • Guidance for authorities and communities, but no specific indicators defined, or valuations provided.
Cross-cutting	HACT (Social Value Bank)	A tool developed for the Housing Associations' Charitable Trust. Valuations for a range of social, participatory, and economic interventions are based on a similar subjective wellbeing approach to the Wellbeing Guidance for Appraisal: Supplementary Green Book Guidance. Valuations also vary by type of beneficiary (e.g., age, London, and outside London).	<ul style="list-style-type: none"> • Automated tool only requires input amounts. • Provides guidance on overlapping indicators. • Provides qualitative Likert-scale survey questions to establish level of attribution. • This tool's methodology is recognised and endorsed by the UK central Government, although is not supplementary guidance. • Widely used within community SROI appraisal, and non-employment related valuations have been adopted and accepted within 	<ul style="list-style-type: none"> • Until 2022, the Social Value Bank was available to use for non-commercial purposes. However, currently licence is required to use the software. • Specific details of the methodologies used to derive the valuations are not clear.

			Government business cases (e.g., CIA and TAG).	
Cross-cutting	HM Government Social Value Model	Developed to standardise approaches to social value appraisal for Central Government Procurement, the Social Value Model accompanies the Public Procurement Note 06/20.	<ul style="list-style-type: none"> It provides a range of reporting metrics across 5 core themes (COVID-19 recovery, tackling economic inequality, fighting climate change, equal opportunity, and wellbeing). 	<ul style="list-style-type: none"> Does not provide monetised values against reporting metrics. Developed specifically for central government procurement, and many reporting metrics may not be relevant for community woodland projects.
Social & Participatory	Social Value: Understanding the wider value of public policy interventions	Published in 2012, this working paper commissioned by Greater Manchester provides a methodology for valuing social outcomes drawing on a wellbeing valuation model, academic research and Government published research.	<ul style="list-style-type: none"> Provides guidance and methodology for using values. Provides specific valuations for improved community wellbeing. 	<ul style="list-style-type: none"> The wellbeing valuation model is fairly crude compared to more recent developments within subjective wellbeing.

Source: Steer-ED