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A socio-ecological approach to ecosystem restoration: How a "Source to Sea" fund could benefit both ecosystems and communities

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Executive Summary

Project Purpose

The following report is the result of a project which examined how a theoretical Source to Sea Fund can embed community benefits into its funding mechanism. This project is supported by the Facility for Investment Ready Nature in Scotland (FIRNS), funded jointly by NatureScot and the National Lottery Heritage Fund, and contributes to a wider initiative to develop a Source to Sea Fund to support ecosystem restoration in the marine, coastal, and river catchment environments. The key idea behind this project is the understanding that ecosystem restoration work does not occur in isolation, but rather within our landscapes, coastscapes, and seascapes. These are places which people inhabit, interact within, and attach multi-faceted importance to, making them incredibly complex socio-ecological spaces. Therefore, considering communities and what matters to them within ecosystem restoration projects is crucial to facilitating a Just Transition and long-term project success. This project report aims to:

- Review current community benefit considerations from potential Source to Sea Fund contributors and existing ecosystem restoration funding mechanisms
- Elicit community benefits, disbenefits, and engagement experiences from those involved in previous ecosystem restoration projects
- Explore possible entry points and limitations to a Source to Sea Fund supporting community benefits and engagement within its funding mechanism
- Understand sentiments towards the growth in nature finance, especially social justice concerns
- Provide strategic recommendations for the Source to Sea Steering Group

Project Method

Semi-structured interviews were conducted with individuals involved directly in previous marine, coastal, and river restoration work or in supporting community groups which were. The restoration project work discussed ranged in size, type, and geographic location to elicit a breadth of perspectives. Further, a desk-based literature review was conducted to understand what could be learned from existing ecosystem restoration funding mechanisms, potential fund contributors' community benefit ambitions, and social reporting metrics. The literature review combined with interviews helped to illuminate challenges in integrating community benefits within ecosystem restoration work and in charting possible ways forward for Source to Sea.

Interview Key Thematic Insights

- **Proportionate requirements and reporting**. Ecosystem restoration projects come in different shapes, sizes, and levels of accompanying capacity on the ground. While community benefits are considered important, a fund that pushes a one-size-fits-all approach to delivering benefits and inclusion is likely to be limited in its overall impact.

- **A Source to Sea Fund can be a connection, partnership, and support hub**. The fund could provide resources, training, and prompts to consider communities and partnership approaches earlier on in the project for greater impact.
- **Long-term funding is needed to support continuous community benefits beyond the project timeline**. Trust, like nature restoration, takes time to build. Community engagement is a process that needs time and money to deliver more holistic, long-term success.
- **Nature finance should be pursued but not without Just Transition considerations**. Private contributions to restoration work administered through the fund is generally seen as a positive, while some wish to understand more of the motivations behind contributors and what that would mean for the restoration work and community benefit.

Recommendations

- **Community benefits are seen as important within ecosystem restoration, but this needs to be intentionally funded and supported by Source to Sea**. This may create perceived trade-offs between supporting purely ecological restoration and community engagement efforts. However, if the goal is to provide meaningful benefits for long-term restoration success, the fund should support projects in finding more holistic solutions which benefit both people and nature throughout the funding cycle.
- **Proportionality considerations are key to making the fund accessible for a range of organisations and in preventing tokenistic engagement**. This may require more intentional thinking during the project's early stages about what can realistically and meaningfully be done within the project scope. The fund developers should consider allowing for more flexible approaches, especially for a smaller project which may not be able to deliver the same scale of community benefits as a larger project.
- **Encourage a bottom-up approach to ecosystem restoration and community benefits**. Place less of an emphasis on what contributors want and more on what ecological and social benefits the fund support within projects. This means communicating the values that the fund supports across projects, possibly through interactive ways like ArcGIS StoryMap. This also means supporting projects that connect to regional priorities.
- **Continue following SMEEF's success in due diligence and transparency**.
- **Ensure the Source to Sea Fund is adequately staffed to support capacity within projects and make connections for greater impact**. This could include skills development or project support for community benefit identification and delivery.
- **Explore the usefulness of various approaches to social and combined socio-ecological reporting metrics**. This is a consideration both in the approach's usefulness to project team objectives and to the Source to Sea Fund itself. This should include exploration of both qualitative and quantitative methods.

A Brief Note on Source to Sea

This report is a key deliverable of the FIRNS[1]-supported project "Developing a Source to Sea Nature Finance Model." The overall objective of the FIRNS project is to conceive a mechanism that will provide support to restoration actions that will improve aquatic ecological conditions for freshwater, through the coastal zone, and into marine environments. It seeks to build on the success and experience gained through an existing marine restoration funding mechanism; the Scottish Marine Environment Enhancement Fund (SMEEF). The project will explore the potential to engage in several nature finance mechanisms and will then provide options to determine whether the funding mechanism should be a single, unified fund from Source to Sea, a twinned fund, or separate marine and freshwater funds. For the purposes of this report, the funding mechanism will be referred to as "Source to Sea Fund" or simply "Source to Sea," to cover the range of possible funding mechanisms. This report considers how a Source to Sea Fund could benefit both nature restoration projects and communities.

Introduction

Ecosystem restoration is indeed the topic of our present decade. Globally, the United Nations marked 2021-2030 as the Decade of Ecosystem Restoration. In 2022, the Scottish Government unveiled its Biodiversity Strategy to 2045 to restore its terrestrial, freshwater, and marine ecosystems. The Scottish Government has also developed a Blue Economy Vision to protect and build sustainable seas as well as the Scottish Wild Salmon Strategy to support catchment-scale restoration of Scotland's iconic rivers for salmon to thrive. These pledges are meant to address the twin climate and biodiversity crises. To ensure these visions are realised, significant finance from both public and private sectors will be needed.

From the public side, the Scottish Government has launched funds to catalyse this process, including the £65 million Nature Restoration Fund, £250 million 10-year Peatland ACTION initiative, and the Facility for Investment Ready Nature in Scotland (FIRNS) which is co-funded by NatureScot and the National Lottery Heritage Fund. While public money has traditionally financed much of past restoration work, there has been steady growth in private finance and philanthropic funding flowing into nature restoration to address the funding gap. With the rise in corporate Environmental, Social, and Governance (ESG) and Corporate Social Responsibility (CSR) practices, there is greater demand and potential finance sources for nature restoration.

While terrestrial restoration work has been underway for some time, marine and freshwater funding and projects are further behind. That gap is beginning to change, with recent funding efforts like SMEEF, which was deployed to support marine and coastal-focused restoration

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[1] Facility for Investment Ready Nature in Scotland

projects around Scotland. As of 2023, SMEEF had distributed £3.3 million to projects across Scotland and attracted both public funding and private voluntary donations. In early 2024, Scottish and Southern Energy Networks have pledged £2 million to SMEEF for seagrass restoration. This continued success serves as "proof of concept" that this kind of fund can work. To build upon SMEEF, integrate river catchment restoration work, and acknowledge the "flows" between these ecosystems through the medium of water, an idea for a "Source to Sea" fund was born. Currently in the ideation stage, the Source to Sea Fund could attract private investment to support river catchment, coastal, and marine restoration initiatives for the longer term. A rough model of the fund depicting several possible finance options is shown in Figure 1.
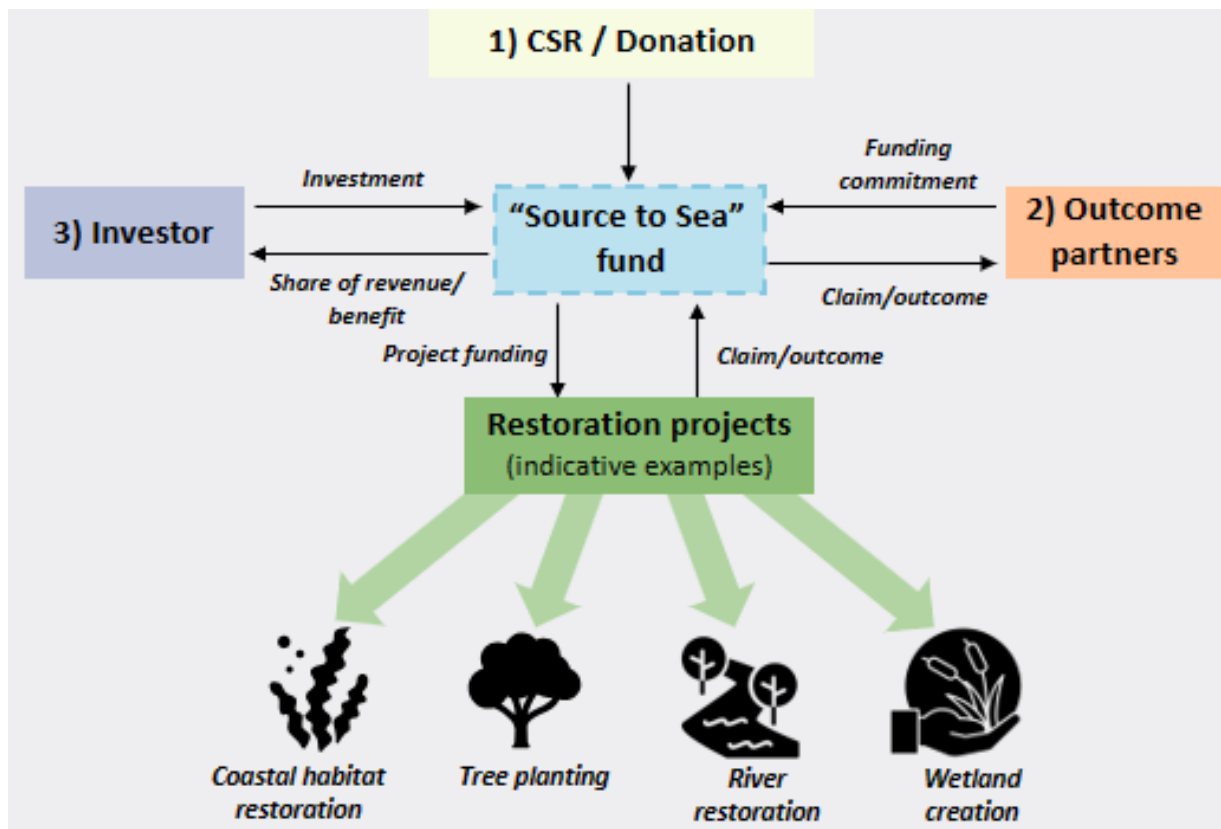
Figure 1: Example Source to Sea fund outline including examples of contributors and supported projects (Source: Finance Earth)

Amid this backdrop of biodiversity pledges and growing restoration work lies the landscapes, coastscapes, and seascapes in which they will happen. These spaces are socio-ecological systems where humans and nature regularly interact and which are important to people in numerous ways, including environmentally, socio-culturally, and economically. Therefore, these restoration projects are taking place in complex spaces, especially in Scotland which has a history of land and sea conservation conflicts as well as highly concentrated private

landownership. With the rise in nature finance[2] for restoration work and growing restoration project sizes, we are certainly in uncharted territory. The Community Empowerment (Scotland) Act from 2015 promotes communities having more of a voice in matters that impact them. As such, in 2022 the Scottish Government published the Interim Principles of Responsible Investment in Natural Capital[3] which supports a Just Transition through engaging local communities[4] to ensure that they benefit from these restoration projects.

The Source to Sea Fund should be no different, with the Steering Group pledging to consider a range of fund options, with community benefits being a fundamental inclusion to each option being considered. The traditional, siloed, primarily ecologically-focused approach to nature restoration is no longer the gold standard. Including communities in nature restoration is not only a key part of ethical decision making but it is also key to strengthening relationships, both between each other and with nature. Further, past lessons have taught us that local community support is an important factor to long-term restoration project success. However, there are real funding and time constraints that may make this work challenging. **Therefore, there is a desire to understand how benefits for communities can be integrated into Source to Sea funding mechanisms**. In other words, in which ways can equity-centred ecosystem restoration[5] be facilitated within the fund. That is what this project report seeks to explore.

Through conducting a desk-based literature review and eleven semi-structured interviews with individuals who have been involved in restoration projects or community groups in Scotland, key recommendations and considerations have been distilled to support the Source to Sea Fund Steering Group in developing a fund that can drive social *and* ecological benefits. The key objectives of this report are:

- Review current community benefit considerations from potential Source to Sea Fund contributors and existing ecosystem restoration funding mechanisms
- Elicit community benefits, disbenefits, and engagement experiences from previous ecosystem restoration projects
- Explore possible entry points and limitations to a Source to Sea Fund supporting community benefits and engagement within its funding mechanism
- Understand sentiments towards the growth in nature finance, especially social justice concerns
- Provide strategic recommendations for the Source to Sea Steering Group

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[2] Nature finance is a broad term and is used throughout this report to mean the financial support of ecosystem restoration from a range of sources such as private, philanthropic, corporate, and institutional finance.
[3] Natural Capital is the "stock" of the world's natural resources.
[4] Communities are often talked about as a homogeneous group, but it is important to remember that even within community groups, individual values and interests may vary.
[5] Equity-centred ecosystem restoration was a term coined in Löfqvist *et al*. (2023).

This report finds that in order for a Source to Sea Fund to integrate meaningful community benefits into its mechanisms, it must be intentional with the fund design, including providing financial support for community engagement, encouraging project teams to consider communities early on, having proportionate expectations, and building connections between projects. The report will explore key community benefit considerations of current funding mechanisms, potential Source to Sea Fund contributors, and ecosystem restoration project affiliates. Understanding these various actors within the fund structure can illuminate potential tensions and opportunities for the fund developers to consider when designing it with communities in mind. For the purposes of streamlining this report with more of a focus on the interview results, please refer to Appendix A for definitions and more information on community benefits, disbenefits, engagement, the importance of inclusion, socio-ecological systems thinking, and tensions present within ecosystem restoration approaches.

Community Considerations of Current Nature Restoration Funding Mechanisms

We examined how current nature restoration funding mechanisms have approached integrating community inclusion and benefits. What are their reporting requirements regarding communities? What metrics or indicators were reported? The matrix below is not a comprehensive list but shows a range of mechanisms with different funding sources, objectives, and community benefit requirements.

Table 1: Summary of nature restoration funding mechanisms

Funding Mechanism	Description	Funding Source(s)	Geographic Scope	Community benefits required?	Social reporting metrics / indicators
Nature Restoration Fund (NRF)	Supports projects that protect and restore Scotland's Biodiversity	**Public** (Scottish Government)	Scotland	**No**, and they will not fund activities related to community benefit or engagement, but these aspects would be seen as an advantage if included within a nature restoration project (*NatureScot*, 2023).	N/A
Peatland ACTION	Supports peatland restoration projects	**Public** (Scottish Government)	Scotland	**No**, but they will consider funding "community initiatives that include restoration and lead to wider public engagement" (*NatureScot*, no date).	Money, and number of days spent on community engagement and awareness raising activities and number of attendees or people engaged (*NatureScot*, no date).
Forestry Grant Scheme	Supports new woodland creation and sustainable management of existing woodlands	**Public** (Scottish Government)	Scotland	**No**, but all woodlands must be managed in accordance with the UK Forestry Standard (*Forestry Commission*, 2023) which says that community inclusion and benefit is recommended, mostly through access and consultation (*Scottish Forestry*, 2023).	There do not appear to be any (*Scottish Government*, no date).

Fund	Description	Funding Type	Location	Public Benefit Required?	Metrics / Reporting
National Lottery Heritage Fund (NLHF)	Supports projects between £10,000 and £10 million that will conserve heritage now, and for future generations	**Public** (The National Lottery)	UK	**Yes**, and benefits should be based on their 4 investment principles: saving heritage, protecting the environment, organizational stability, and inclusion, access and participation (*Heritage Fund*, no date).	Grantees choose project metrics and there is a Good Practice Guidance shared on their website where they link example evaluation methods and theory of change resources (*Heritage Fund*, 2024).
Scottish Marine Environmental Enhancement Fund (SMEEF)	Innovative fund that supports the health and restoration of marine ecosystems	**Blended** (NRF and voluntary ESG donations)	Scotland	**No**, but community engagement resources are available on the SMEEF website and applicants with community engagement plans or community-led elements are viewed more favourably (*SMEEF*, no date).	N/A
Riverwoods – Investment Readiness Pioneers	Supporting river woodland restoration projects that have the opportunity to be financed beyond traditional grants through the sale of benefits such as biodiversity units and carbon credits	**Blended** (Esme Fairbairn funded initial phase and then private finance via eventual sale of ecosystem services)[6]	Scotland	**Yes,** there is a clear focus of engaging communities, landowners, and other stakeholders to identify projects to restore riparian woodlands. There is also a focus on continued community engagement throughout the project (*Riverwoods*, no date).	Projects develop their own community indicators such as increase in pro-environmental values. Many are working with engagement consultants to identify these indicators.
Bioregional Weaving Labs Collective	Supports landscape-scale, socio-ecological regeneration for a minimum of 20 years	**Blended** (Grants, philanthropic donations, repayable finance)	Regional (e.g. Waterford, Ireland)	**Yes**, it requires a multi-stakeholder partnership and reporting on social impacts (*Ashoka*, no date).	4 Returns Framework: Natural, Social, Financial, and Inspiration (Dudley *et al*, 2021). The social return measures vary by landscape but could include: direct jobs created, number of farmers in transition to regenerative agriculture, and % of farmers reporting high quality of life.
Highlands and Islands Environmental Foundations (HIEF)	Supports small, community-led nature restoration projects	**Private** (private company and individual philanthropy)	Highlands & Islands	**No**, but it is required that the projects are community-led so the benefit may be inherent.	Flexible. Grantees can report via a variety of methods including conservation, an email, photo sharing (personal communication, 2024).
Greater Manchester Environmental Fund (Green Spaces Fund)	The UK's first Environmental Impact Fund. It supports restoration projects in the Greater Manchester area that benefit both people and nature	**Private** (philanthropic donations and compensation funds)	Greater Manchester	**Yes**, must include public access and preference is for projects that benefit communities experiencing inequalities (using the IMD[7]) or those lacking access to greenspace. The fund is also open to applications from community groups (*GMEF*, 2023).	Number of jobs and traineeships created, days of volunteer time, people engaged, partnerships created (*GMEF*, no date)

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[6] Note: As of March 2024, two projects have been awarded funding to develop 'investment ready' propositions to be financed privately. There have not been any sale of ecosystem services to date.

[7] IMD = Index of Multiple Deprivation

It is interesting to note that the funds supported by the Scottish Government, such as the NRF, Peatland ACTION, and the Forestry Grant Scheme appear to be more singularly focused on nature creation and restoration. For example, the NRF will not fund community elements of any funded projects, including foot paths. Another observation is that there appears to be a range of social reporting metrics and requirements across funds – from no requirements, to flexible methods, to the more comprehensive frameworks such as the 4 Returns Framework[8]. SMEEF, which Source to Sea hopes to build from, did not have community benefit requirements but provided a restoration toolkit with an engagement section on its website to connect project managers to relevant resources. The NLHF seems to be the most focused on community benefits and reporting, permitting a flexible range of qualitative and quantitative methods. However, NLHF requirements and reporting can be considered somewhat onerous (personal communication, 2024), so there may need to be a better balance for Source to Sea to consider.

While this matrix indicates that community benefits were reported from previous nature restoration projects, there isn't much of an indication around who received these benefits. For example, it is not clear who the jobs went to, how well they paid, or how long they lasted. After all, longevity is a problem across funds, with many projects being short term (Borgström, Zachrisson and Eckerberg, 2016). It is also unclear if the benefits produced and reported were appropriate for the needs of geographic communities and communities of interest.

The reporting around community benefits appears to be mainly quantitative, establishing the 'immediate' and 'tangible' benefits such as jobs created, number of events, and number of volunteers. Disbenefits are largely absent. The point here is that it is certainly possible within funding mechanisms to include benefits for both ecosystems and people. However, a more intentional understanding of the types of benefits, disbenefits, and challenges that are inherent within the types of restoration projects expected to be supported by Source to Sea is crucial to understand how the fund can support them.

Potential Fund Contributors' Emphasis on Communities

We also examined potential fund contributors' motivations in supporting community benefits within restoration. Although the types of funding that Source to Sea will attract are currently unclear, the working assumption is that it may attract similar types of private contributions as SMEEF. That is, ESG and CSR donations from corporations. ESG/CSR objectives within nature restoration are a growing and evolving space. While contribution motivations may vary, they could include having a material impact on marine and freshwater ecosystems, having material

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[8] The 4 Returns Framework is a holistic framework designed to understand the multi-dimensional impacts from landscape-scale restoration and to create a shared, long-term vision for such a landscape. The 4 returns are comprised of: inspirational return, social return, natural return, and financial return.

financial risks that could be mitigated from improvements to 'ecosystem services[9]' (e.g. flood risk), wanting to provide volunteer opportunities for employees, or CSR donations for public relation purposes. See Appendix B for further information and examples of community benefit considerations from companies such as Aviva, Copenhagen Infrastructure Partners, Glenturret Distillery, and developers who may be subject to emerging biodiversity (or marine) net gain or strategic compensation policy or legislation. These potential contributors are certainly interested in making a positive impact through restoring the environment and supporting local communities. However, ESG aspirations and goals, while they can have qualitative elements to add colour to company reports, are determined by social metrics which are predominately quantitative, standardised, aggregated, siloed from environmental impacts, and outcome based. Therefore, there is a risk of missing out on the inclusion of other values related to nature which might be held by local communities but may go unincorporated into restoration planning processes unless specifically desired by these contributors.

Interview Method

To gain additional context into past community benefits and inclusion efforts in ecosystem restoration as well as what potential fund applicants would like to see from a Source to Sea Fund to support this, there was a need to gather perceptions of what has happened on-the-ground so far. Interviews are a good way to understand perceptions (Castillo, Smith-Ramírez and Claramunt, 2021). Therefore, primary data collection for this project occurred through eleven semi-structured interviews[10] which were conducted with fourteen individuals[11] involved in either restoration projects directly or with community groups who were involved in them. Interviews lasted, on average, 60 minutes. There was a special focus on marine, coastal, and river restoration projects since those are most applicable to the types of projects that will be supported through Source to Sea. These individuals covered a range of restoration project types, sizes, and geographies which are summarised in Table 2. The interviewees also came from a range of organisations, some of which had more of an environmental focus, while others had more of a people or community focus.

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[9] Ecosystem services are the "flows" of services from natural capital stocks to humans.
[10] The researcher also sat in on seven interviews conducted by Howell Marine Consulting as part of the wider Source to Sea Fund project which provided additional context.
[11] Two interviews had more than one person present.

Table 2: Interviewee Summary[12]

Restoration Work		General Project Size		Geographic Location	
Type	**Number**	**Type**	**Number**	**Type**	**Number**
River (sub)catchment	5	Small / pilot	8	Rural	9
Seagrass & oyster restoration	2	Large / landscape	5	Urban	2
Woodland creation	1				
Riparian tree planting	1				
Seagrass monitoring	1				
Peatland restoration	1				
Coastal flood mitigation	1				
Marine ecosystem monitoring	1				

The interviews were designed to touch on the following themes:

- Previous community benefits and disbenefits that came from ecosystem restoration work
- Best practices and challenges with including communities within ecosystem restoration
- Possible entry points, barriers, and trade-offs to a Source to Sea fund supporting community engagement and benefits within its funding mechanism
- Sentiments towards the growth in finance within nature restoration and any social justice concerns or potential impacts

Interviews were either recorded and transcribed or notes were taken during the interview. Interview data was analysed with NVivo software using a combination of inductive and deductive coding techniques (Bingham, 2023). This helps to balance researcher bias in maintaining an open mind for emergent themes while still providing some structure. This analysis was an iterative process that involved combining similar 'codes' into hierarchical themes. The themes were largely driven by relevance to the Source to Sea Fund in terms of supporting community benefits. The researcher did not pre-define any terms relating to community, community benefit, or community engagement, so the interpretation of these terms was that of each interviewee. Further, benefits and disbenefits referred to within the key findings section are from the perspective of the interviewees and may not fully reflect the opinions of the communities themselves. The reason the focus of interviews was on project managers and those involved in restoration was because these individuals are in the unique position of having experience applying for funding and interacting with communities. See Appendix C for more information on research design and methods.

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[12] Some interviewees spoke about more than one restoration project type and project size so the respective totals add up to more than eleven.

Interview Findings

This section is a thematic synthesis of the successes and challenges related to community benefit and engagement within past restoration work as well as how this relates to the role a Source to Sea Fund could play in supporting projects in this area.

What can be learnt from previous restoration projects?

The inclusion of communities to ensure that they can benefit from nature restoration was described as a complicated topic by nearly every interviewee. While seen as important, the definitions of community and benefits were often unclear. For example, one person noted: "*It's quite a remote site... it's not clear who the community is*," while another highlighted: "*Community means different things across different partners and that is an interesting challenge across partner projects*." A few interviewees mentioned that including communities in restoration work was a relatively new thing, having "*learned from our mistakes that you can't helicopter in with plants and animals and leave them behind, that's not good practice.*" As a result, there are a lot of engagement techniques that are currently being trialled with the goal of continuing to learn from this process of what it means to deliver meaningful community benefits.

Although community benefits and inclusion are seen as complex, all interviewees were able to name specific community benefits that, from their perspective, had resulted from previous restoration work. Environmental education was the top-mentioned benefit of restoration work overall, spanning project types and geographies. This included things such as events aimed at increasing general knowledge of climate change, river species identification, and ocean literacy. One interviewee said that flood mitigation was a key concern in the local community, so that was the main benefit that they saw coming from the restoration work. There were also several mentions of intangible benefits which spanned time and space. For example, a few interviewees spoke about the projects that spun off from restoration projects which included a community-led element as a legacy benefit. Others mentioned that reciprocal benefits, such as those which foster human-nature connection are key to successful community-centric restoration. Figure 2 summarises the key benefits and disbenefits that surfaced during interviews.

COMMUNITY BENEFITS

COMMUNITY DISBENEFITS

One-way benefits
such as ecosystem services or benefits that could be provided without direct community involvement

Reciprocal benefits
referring to benefits relating to strengthening human-nature or human-human connections

Legacy benefits
Referring to benefits that span beyond the project lifetime

One-way benefits
Flood mitigation
Access

Reciprocal benefits
Education events
Volunteering
Citizen science
Social and human-nature relationship enhancement through inclusion

Legacy benefits
Empowerment
Learning from mistakes

Volunteer fatigue

Lack of incentives & pushback from community members (e.g. farmers, fishermen, landowners)
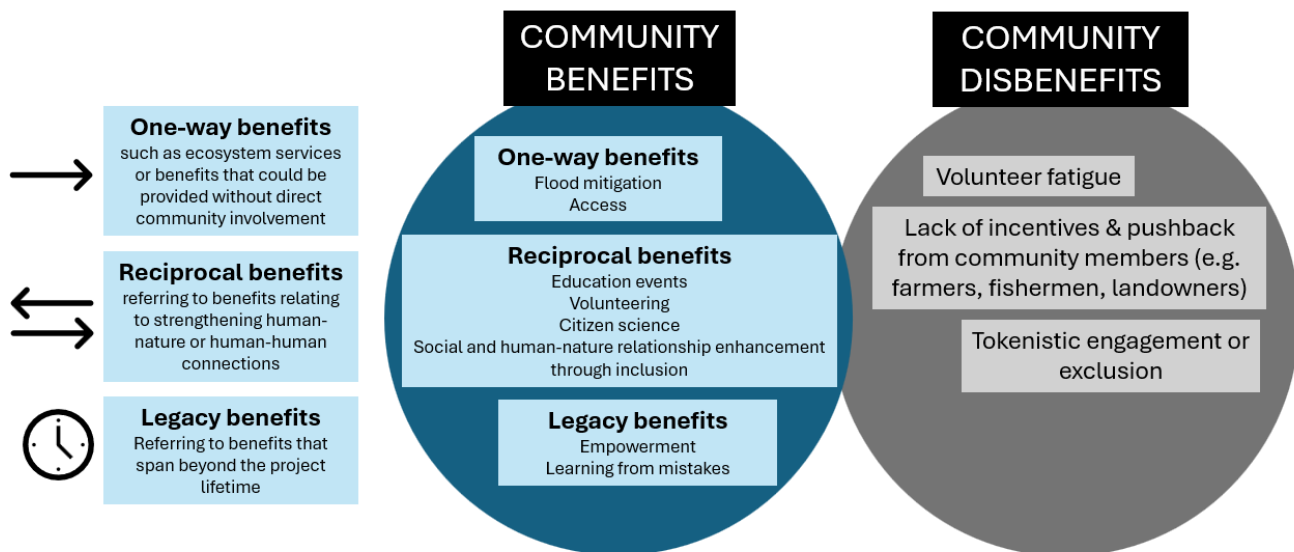
Tokenistic engagement or exclusion

Figure 2: Summary of key benefits and disbenefits from past restoration work according to interviewees

Disbenefits from past restoration projects were also discussed. Pushback from community members was the top-mentioned disbenefit, with some mentioning that sometimes they faced opposition or hesitation from a small minority of community members or land managers. When asked what was driving this pushback, interviewees mentioned things such as historical conservation exclusion, a desire to continue with current land or marine uses, landowner pushback from too much community control, and lack of (monetary) incentives. Some interviewees reported that community members felt uninformed or ignored, their concerns falling on deaf ears. One participant emphasised: "*This [consultation] can do more damage when people take time and effort to replying to these consultations. For their views to be dismissed, it makes people angry.*"

There were also numerous challenges associated with including communities and delivering benefits within nature restoration. See Table 3 below for a list and Appendix C for applicable quotes. While there were some shared challenges across projects, the geographic location and project size created unique challenges as well. The tricky balance between community engagement and ecological restoration efforts was discussed in most interviews. Some positioned the challenge as a matter of a shortage in project time, capacity, or funding, while others positioned this balance as an ecological and social goal misalignment. One participant highlighted: "*There's a strong preference for community-led projects and that's great because there is enthusiasm, but it doesn't always match with the ecological data needs.*" Although including communities is seen as important, some said that including communities can slow the project process, which can be frustrating.

Table 3: Summary of community inclusion challenges

Challenge	Most impacted project types
Low turn-out at participation events	General challenge, but particularly rural
Challenging balance and misaligned goals: Community involvement versus ecological restoration	Organisations with environmental improvement as key priority
Limited project team capacity	Rural, small projects
Short funding timescales	General challenge
Lack of sufficient funding	General challenge
Inaccessible environments	Marine
Land-use power dynamics	River/Terrestrial
Challenges with community benefit reporting	General challenge

Lack of funding and time to engage in a meaningful way was a challenge that spanned geographies; especially the money and time to reach people to participate in events that are carried out as part of restoration projects. A few interviewees from projects taking place in rural areas mentioned that due to lower population density, volunteer fatigue is common, and more effort is needed to reach new people and build trust, especially with farmers and landowners. Those involved in urban restoration projects noted that with more people comes more perspectives and so funding and time are needed to ensure that there are engagement activities to reach multiple groups.

Tight funding timelines and budgets were seen as the key drivers of this. One interviewee mentioned that "*Funds have such tight time limits, and how do you do that? Especially when you've got to show community benefit. The trees will barely be in the ground*" while others noted that "*We need the funder to be happy for that engagement to happen and to support it.*" There may also be a challenge to including communities within a source-to-sea systems approach. While participants mentioned wanting to break out of silos and work with other organisations on restoration projects, some worried that with a wider consideration of the impacts, the slower the process would go, and the more difficult pinning down the true impacts would be.

Despite the numerous challenges that were expressed by participants, they also shared success stories, such as aligning broader community values with those of the nature restoration, letting community members suggest reasonable changes to projects, asking locals what they'd like to learn about surrounding river ecosystems, and through face-to-face conversations to build trust and understand what scale of activities and benefits are desired. Successful engagement and benefit delivery seemed to involve some form of wider ecological restoration importance discussions and finding a link with community needs.

For example, one interviewee said:

"*We brought in the design council... they ran a community workshop. So it was a co-design workshop where we discussed issues facing [the town] and discussed green solutions to understand what their values were, what they wanted the future to be and how does that match up with sea level rise and projections... putting them in the drivers seat and letting them run the workshop for their own area. While no financial benefit, it was really good for the community.*"

While siloed working has happened historically, four interviews mentioned that their projects were more successful with community inclusion when they broke out of siloed working and embraced partnerships with, for example, local councils or community groups. Diversifying engagement methods to include arts-based events were shown to "*broaden our audience*" outside of those who might not have engaged previously. One interviewee even wondered: "*Maybe art is just as much about nature restoration as planting trees.*" It is worth noting that these art-based engagement methods were pursued by interviewees involved in the larger restoration projects with larger teams and that community values were at the heart of their organisations' ethos. See Appendix D for additional quotes and information from interviews.

How could a Source to Sea fund could support communities?

After reflecting on the social impacts of previous restoration work, interviewees were asked to explore how a Source to Sea Fund could support projects to be inclusive and deliver benefits for communities.

The four ways are:

- Proportionate requirements and reporting
- Source to Sea Fund as a connection, partnership, and support hub
- Long-term funding to support long-term community benefits
- Nature finance should be pursued but not without Just Transition considerations

Proportionate requirements & reporting

The top priority mentioned during interviews was for the fund to recognise that smaller projects may not be able to deliver the same scale of benefits as larger projects and that this should be reflected in proportionate requirements and support. For example, "*For riparian tree planting, it depends on the scale. If we have a few trees to plant, I don't think we need to engage the community and the funding was only for three months. Flood management restoration, you definitely need to engage the community.*" Further, every project may be starting out from a different place in terms of historical engagement outcomes and knowledge of community needs and values. There was a desire for the fund to support a range of project sizes and that this

heterogeneity of project types and sizes will not easily allow for blanket requirements. Therefore, two broad project types were suggested and are depicted in Figure 3.
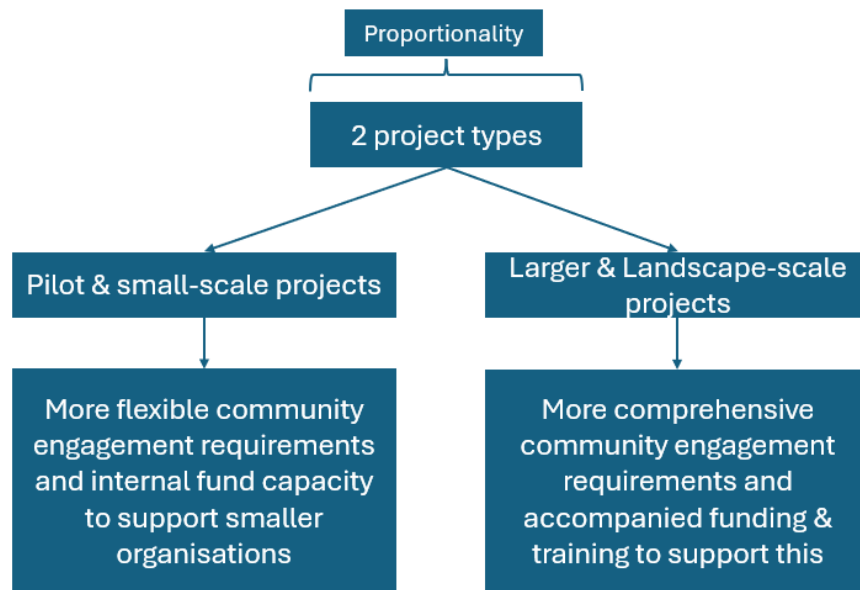

Figure 3: Two broad suggested project types for Source to Sea to support

A few people mentioned that onerous requirements for a smaller or community-led project would put dissuade them from applying to the Source to Sea Fund since they wouldn't have the staff capacity to deliver these. Therefore, it was suggested by some to have a person employed within the fund to help with capacity building and support, especially for the smaller groups.

The conversation around reporting requirements also reflected a need for proportionality considerations. While some, namely those working on larger projects, indicated that it would be helpful for the fund developers to indicate which metrics and social reporting frameworks they would like to see, others, namely those working on smaller projects, emphasised the need for fund flexibility in what is reported, similar to that of SMEEF. Either way, there was a desire to understand what metrics Source to Sea funders would like to see and how the information will be used so that it's not just another project report collecting dust. The NLHF was mentioned in two interviews as being a potential model for community benefit reporting because it is seen as comprehensive while allowing project teams the flexibility to pick their own metrics. One participant also mentioned the National Lottery Community Fund, saying:

> "*The National Lottery Community Fund accepts conversations, videos, presentations, annual reports for an output and that's hugely beneficial so you're not writing a report that's only going to be read once.*"

Extensive reporting takes time and money which can detract from the ability to deliver ecological and community benefits. If the reporting requires talking with volunteer participants or other community groups to understand impact, this can take even more of volunteer time.

> "*You're already asking them to contribute to the activity and then to ask them to sit down and reflect on it may not come naturally to many people.*"

Therefore, a balance should be struck. Some mentioned the challenge with capturing community benefits, especially things like project legacy impacts and community empowerment, in a way that truly reflects meaningful benefit. For example, one interviewee admitted: "*Participation metrics look good to a funder but don't actually tell you anything.*" One participant recommended considering the 4 Returns Framework[13] for larger natural capital projects. Others mentioned that they have used interviews and surveys in the past with varying degrees of perceived usefulness and that more exploration on methods is needed.

Source to Sea Fund as a connection, partnership & support hub

Source to Sea is seen as a potential hub that could connect projects working in geographic proximity or engaged in similar types of work to learn from each other, create synergies, and drive a less-siloed approach to delivering community benefits within projects.

> "*Some other funders, if they pick a theme, they will host an annual conference and they will do data swapping and lessons learned and also informal networking… The convening purpose of a funder in promoting solidarity instead of competition could be a really key purpose that more funders can do.*"

Breaking out of silos, working through partnerships, and embracing knowledge sharing has proven beneficial to ensuring a good approach to community inclusion and benefits.

> "*Things maybe the biodiversity guy wouldn't consider. We don't do these projects in isolation anymore. The local council would consider community benefits more than the Trust would.*"

> "*We've also learned from Seawilding on the west coast and there has been beautiful sharing, what's worked for people both environmentally and socially and build in trial and error. It's still really new.*"

To support project managers in managing conflicts, some suggested that the fund could provide trainings on community engagement techniques and conflict resolution to upskill project teams or to help connect projects to mediators if it would be helpful for the given context. Most interviewees noted that it was key for the fund to prompt projects to consider communities

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[13] The 4 Returns Framework is a holistic framework designed to understand the multi-dimensional impacts from landscape-scale restoration and to create a shared, long-term vision for such a landscape (Dudley *et al*, 2021). The 4 returns are comprised of: inspirational return, social return, natural return, and financial return.

throughout the life of the project, including "*listen to them and incorporate their views into the design and include young people too if that's appropriate.*" With limited time and funding, if the fund doesn't support and require project teams to pursue community benefits, they will often remain unincorporated.

Long-term funding to support long-term community benefits

Building connections and lasting partnerships between projects supported by Source to Sesa would only be realised with the time and funding to do so. For example, some projects have secured funding to contract community engagement officers, but these are usually shorter-term positions depending on the project size. Several people reflected on how long it takes to build trust, particularly in rural areas, and therefore continuous funding is needed. Some noted that like nature recovery, community engagement and trust building is a process instead of an outcome and is therefore undermined by short-term funding. Long-term, adequate funding is seen as crucial by interviewees to being able to deliver meaningful benefits and inclusion.

> "*The stats on D&I and environment shows that it is the least diverse sector after farming and that links to funding timelines. If we look to combat historical exclusion, it needs thinking and expertise, longer periods of time with more consultation and more expertise at the beginning especially when working in marginalised communities.*"

Further, community values were described as dynamic across project lifetimes and so it would be helpful if project plans were allowed to adapt as needed. One interviewee explained that: "*There are so many reasons that project would change so being willing to flex on the project and flex on when the money has to be spent by would be great. This is a problem across all funds at the moment.*" Another suggestion was including funding for things that would promote a project legacy or education, such as internships, which specifically target younger people and can be influential in future careers.

Nature finance should be pursued but not without Just Transition considerations

Finally, sentiments around the growth in nature finance were discussed and whether there were implications for a Source to Sea fund to consider with regards to communities. A majority of interviewees agreed that private contributions to nature restoration via a Source to Sea Fund was a great opportunity and should be pursued. However, there was a feeling amongst some that nature finance is currently the "*wild west*" with a need for more regulatory control, ethical considerations, inherent power dynamics, uncertainty, time mismatches, and risk. For example, a potential time mismatch was described by one interviewee:

> "*In England, water companies employ river restoration officers and encourage farmers and landowners to make changes. All the officers I spoke to say it takes minimum 5 years and that's the easy ones to get them to agree to restoration. And that needs commitment and money and these things might not work quickly enough for corporations.*"

Further, land use decisions can fall primarily on landowners, with one interviewee reflecting: "*The buyer could be doing a deal with just the three estates unless the buyer says there needs to be a community benefit.*" Would investors or contributors want to pay more to engage the wider community? A few interviewees mentioned that the "*interests have to align*" in order for that to happen.

> "*If we want to involve investors, some of them may have a different culture and may bring a different approach. Investors are trying to do this as cheaply as they can. Community investment is discretionary.*"

There was scepticism around the financial benefits that this fund could distribute to communities since it will not likely be 'selling' ecosystem services in the shorter term. However, should the Source to Sea Fund choose to pursue contributions from biodiversity compliance markets in the future, participants wondered whether there was a way to redistribute some of that offtake to communities. Finally, a few interviewees urged continued transparency which SMEEF offered about where fund contribution money is coming from and a better understanding of what the motives were.

Source to Sea Fund Recommendations

Thus far, this report has reviewed community benefit considerations within existing restoration funding mechanisms, potential contributors, and within past restoration projects. A diagram showing a simple Source to Sea Fund structure (Figure 4) summarises these key considerations, general time scales, and social indicators. By looking at the general differences at each level, we can see potential mismatches across this fund structure which could make integrating *meaningful* community benefits into Source to Sea projects challenging. Fund contributors and funds themselves have largely been focused on shorter timelines and measured social impacts in quantitative or monetary terms. While restoration project teams also focus mostly on quantitative (ecological) data, there is a desire for longer term funding to support continued ecological recovery and social benefit generation locally. Finally, communities may perceive both tangible and intangible benefits from restoration projects through a cultural, economic, and historical lens which can be more difficult to quantify or measure.

These mismatches may not be easily reconciled or aligned because these groups are fundamentally speaking different 'languages'. If a Source to Sea Fund wants to truly integrate communities, there is a need to support bottom-up benefits or those articulated by the communities themselves. The fund should also acknowledge that communities are heterogeneous groups across Scotland and that a top-down approach may inadvertently push a standardised view of community benefits and undermine the ability to deliver them meaningfully.

Fund Contributors
Largely quantitative benefits, outcome-based, more macro focused

Fund
Largely quantitative benefits, outcome-based, short-term funding and timelines

Restoration Projects
Metrics and outcomes determined by fund requirements

Restoration Project Team
Evidence-based quantitative ecological indicators, longer term view of restoration, more local focus

Local Communities
Culture, histories, individual and shared values, perceptions, trust in the longer term, more local focus
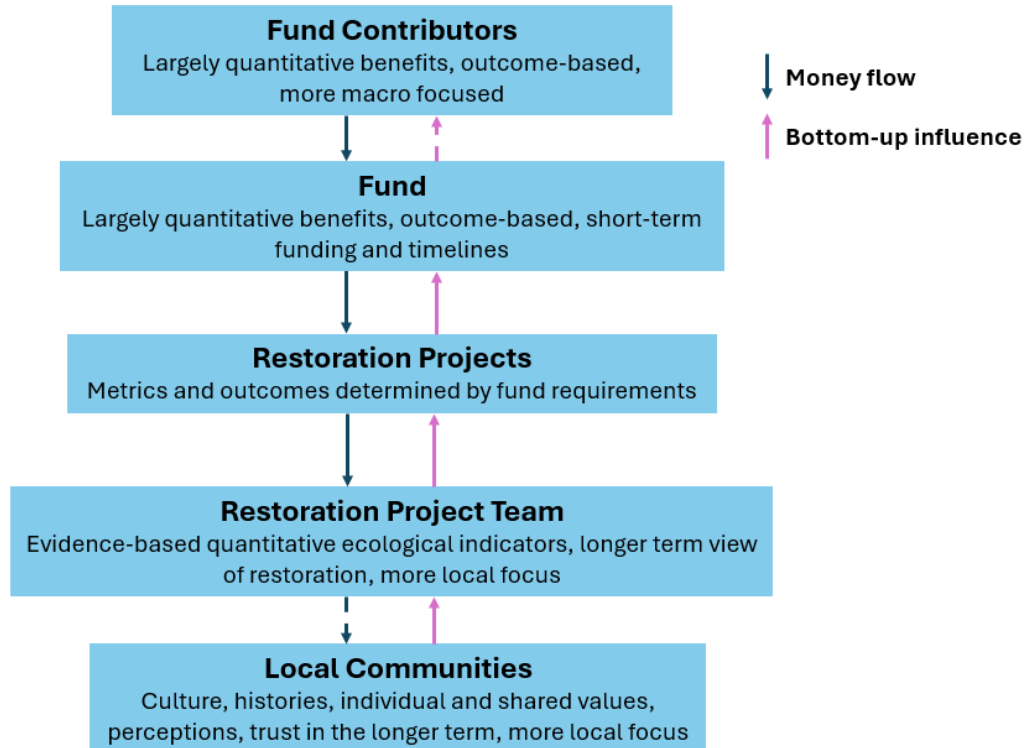
Money flow
Bottom-up influence

Figure 4: Fund diagram showing current key considerations, time scales, and social indicators at each stage

While a Source to Sea Fund certainly won't be able to address all challenges that were shared during interviews, it may have the opportunity, by being positioned between contributors and restoration projects, to determine where and how money is spent. In this way, funds can signal what they deem important through the kinds of work they choose to support. The following recommendations are practical ways that the Source to Sea Fund developers can begin thinking about integrating communities into the funding mechanism. See Appendix E for further information.

- **Community benefits are seen as important to include within ecosystem restoration, but this needs to be intentionally funded and supported by Source to Sea**. It will be important to consider what role the fund wants to play in supporting community benefits. The interview results suggest that project teams think this is important but that they need dedicated financial support and early prompting. For long-term restoration success, the fund should prompt applicants, who may be more ecologically focused, to consider communities throughout the funding lifecycle. Figure 5 includes some suggestions for keeping communities top-of-mind throughout. Encouraging more synergistic solutions and partnership approaches which benefit both people and ecosystems, such as restoration education and citizen science programmes, may help to combat the 'trade-

offs' between supporting purely ecological restoration and community engagement activities.
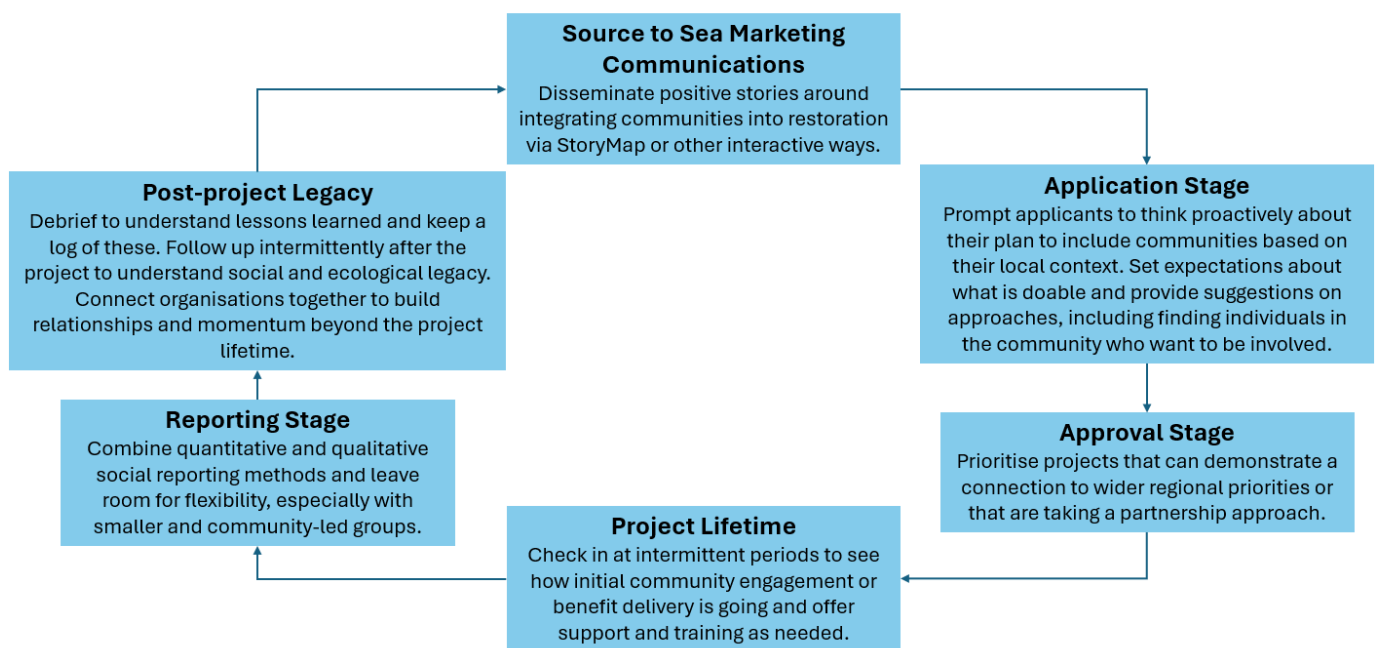

Figure 5: Funding stages and how community benefits can be integrated throughout

- **Proportionality considerations are key to making the fund accessible for a range of organisations and to prevent tokenistic engagement**. **There should be more intentional thinking about what can realistically be done within the project scope**. Not only does this have to do with capacity of the restoration team, but also with the project type. Having different expectations, potentially through a 'decision tree' approach, for smaller projects compared to larger projects will make the fund more accessible. Although requiring community benefits (an outcome) within project timelines may feel like an ideal solution, some benefits can be difficult to measure and may even come after the project has completed. Establishing a blanket requirement of community benefits could crowd out smaller projects or encourage teams to hold events simply to tick a box. Instead, the fund could require project applicants to articulate community engagement and benefit expectations based on context-specific factors and capacity realities early on. This could help the fund to better understand what challenges exist and whether the fund could help mitigate these. Looking towards SMEEF or the National Lottery Community Fund on reporting flexibility for small projects could help. Continued reflection on lessons learned from inclusion approaches will be needed.

- **Encourage a bottom-up approach to ecosystem restoration and community benefits**. There is a need to recontextualise why we are doing this. While the common term around ecosystem restoration funding is about "value for money," it is more ethical to think about supporting these projects and communities as "money for values" (O'Connor, 2022). That is, money to support **ecological and community benefits** within restoration work. Therefore, there should be less of an emphasis on what contributors want and more on what ecological and social benefits the fund can support within projects. For example, if a contributor is focused on getting "value for money," they might want to support projects that have the most volunteers or events, which might favour larger or more urban-focused projects. Source to Sea could be a leader and seek to educate contributors about the synergies and benefits the fund is creating across landscapes. For example, the NRF uses a StoryMap to spatially summarise the projects it funds. Source to Sea could consider doing something similar but being more strategic to show investors the types of projects, how they are interconnected, and also what community benefit and engagement wins have occurred. There could also be an internal layer of the StoryMap to understand which projects are not successful in funding and understand if there are any geographic or thematic trends in this to understand fund accessibility gaps.

- **Prioritise supporting projects that connect to regional priorities**. Following from the previous recommendation, there are already blueprints for what matters to local communities in the form of local development, biodiversity, and marine plans. For example, the Almond Headwaters project, which is supported by the Riverwoods Investment Readiness Pioneers, recognises that the Perth & Kinross Community-Led Local Development (CLLD) and local council already identify local needs and shape plans, and the project is keen to collaborate with these established actors. There could also be a push from the fund for projects to tap into the Local Biodiversity Action Plans[14] (LBAP) to understand local and regional priorities as well as Regional Marine Plans. The recently completed Fishery Management Plans covering all of Scotland's 44 river catchment fishery districts present a good opportunity to engage with bottom-up planning processes that engage with local community interests and biodiversity priorities. Landscape-scale approaches are good for producing wider impacts, but it is important not to lose out on the smaller or community-led projects and how they want to fit in.

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[14] At the time of this writing, the LBAP are currently stalled, so may not be ready to action on as of now.

- **Continue following SMEEF's success in due diligence and transparency**. The source of money matters to some project teams and organisations and may also matter to communities. Continuing to be open about the source of funding is crucial but it is also important to have strict criteria and a robust due diligence process to avoid greenwashing and 'community-washing'.

- **Ensure the Source to Sea Fund is adequately staffed to support capacity within projects and make connections for greater impact**. Source to Sea should be properly staffed to provide appropriate support, especially to smaller projects, to deliver community benefits. A lighter touch approach to this could involve producing an engagement toolkit[15] like SMEEF did. The usefulness of this toolkit has not yet been measured (personal communication, 2024) so may need to be supplemented with other support. For example, could there be a short video that introduces engagement instead of having people comb through documents? Further, HIEF[16] provides general support to community-led projects who lack capacity and resources, connecting them with support groups such as the Coastal Communities Network (CCN), and holds debriefs for each project to foster mutual learning (personal communication, 2024). Seawilding is the "pioneer of the community-led approach to marine restoration" where it benefited from partnerships to prolong funding and help grow impact, momentum, and political attention (Munro, 2022). It could also be helpful for Source to Sea to urge organisations to reflect on their position in relation to the communities they work around. What are the histories that may be causing conflicts? Source to Sea could facilitate these reflection prompts and connections to drive greater impact.

- **Explore the usefulness of various social and socio-ecological reporting metrics**. This is a consideration both in the reporting method's usefulness to project teams and to the Source to Sea Fund itself. The Intergovernmental Science-Policy Panel on Biodiversity and Ecosystem Services (IPBES) 2022 report states that gathering diverse values and perspectives related to how nature matters to people is crucial for ethical decision-making (*IPBES*, 2022). Quick, quantitative metrics like volunteer numbers and events held look great in project reports and to fund contributors because they are easy to read, understand, and track. They also don't take much effort for a project manager to fill out. What ends up being missed, though, is not *what* is done but *how* it's done. Understanding the qualitative richness of other benefits or disbenefits that may have come from restoration projects alongside quantitative data could illuminate learnings previously

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[15] Funded by Crown Estate Scotland
[16] Highlands and Islands Environmental Foundation

unseen. This could take more time, though. For example, NLHF is strongly in support of community benefit and allows a range of reporting metrics to track this, but their potentially onerous reporting requirements may be too intense for some organisations. A better balance could be struck with Source to Sea. Examples to assess more holistic impact, which may be most relevant to projects with more resources, are shown in Figure 6. See Appendix E for more information.
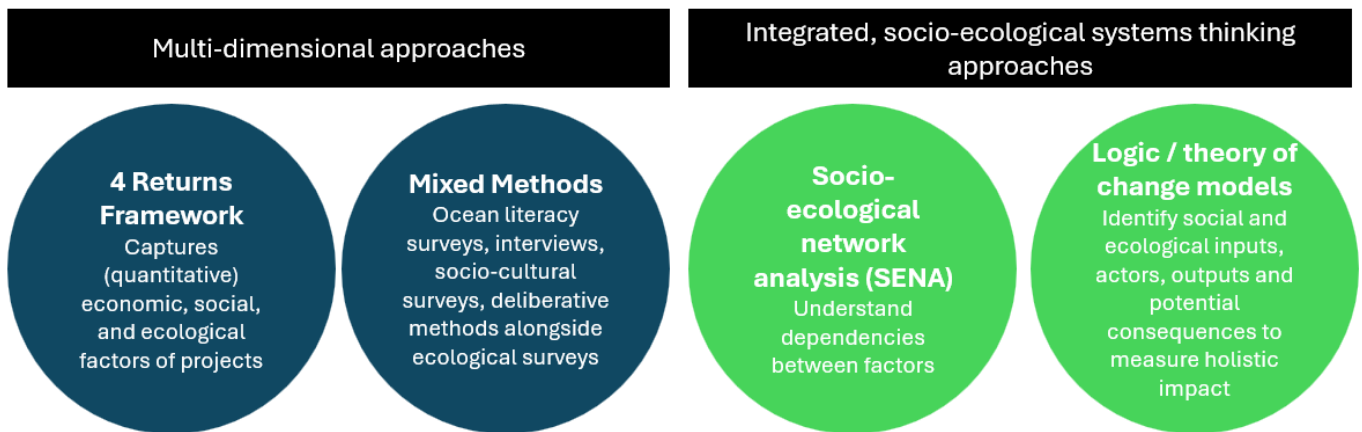

Figure 6: Examples of methods for assessing social impact

Conclusion

With a goal of long-term restoration, it is crucial that the Source to Sea Fund developers integrate communities into funding mechanisms, for both ethical and ecological reasons. Community benefits, empowerment and increased connectedness can be pursued at the local level alongside habitat regeneration across landscapes and seascapes. A Source to Sea fund can support these benefits through intentional efforts and a balanced approach, leaning into contributors' desires to support integrated projects. This fund could support projects in navigating the complexity of delivering community benefits, taking the lead in spreading the 'source-to-sea' message to contributors and others who are interested in learning more. Ultimately, determining what meaningful community benefits are within restoration work must come from communities themselves. While there are challenges and no silver bullet solution to shifting to this less siloed restoration approach, Source to Sea can and should take steps towards this goal.

References

Adams, C.A. and Abhayawansa, S. (2022) 'Connecting the COVID-19 pandemic, environmental, social and governance (ESG) investing and calls for "harmonisation" of sustainability reporting', *Critical Perspectives on Accounting*, 82, p. 102309. Available at: https://doi.org/10.1016/j.cpa.2021.102309.

Alba-Patiño, D. *et al.* (2021) 'Social indicators of ecosystem restoration for enhancing human wellbeing', *Resources, Conservation and Recycling*, 174, p. 105782. Available at: https://doi.org/10.1016/j.resconrec.2021.105782.

Ashoka (no date). *Bioregional Weaving Labs*. Available at: https://www.ashoka.org/en-nl/program/bioregional-weaving-labs-collective (Accessed: 15 March 2024).

Aviva (2022). 'Aviva plc 2022 Reporting Criteria' Available at: https://www.aviva.com/investors/reports/ (Accessed: 14 March 2024).

Aviva (no date). *Aviva and WWF: a natural partnership*. Available at: https://www.aviva.com/sustainability/aviva-and-wwf/ (Accessed: 14 March 2024).

Bennett, N.J. (2016) 'Using perceptions as evidence to improve conservation and environmental management', *Conservation Biology: The Journal of the Society for Conservation Biology*, 30(3), pp. 582–592. Available at: https://doi.org/10.1111/cobi.12681.

Bingham, A.J. (2023) 'From Data Management to Actionable Findings: A Five-Phase Process of Qualitative Data Analysis', *International Journal of Qualitative Methods*, 22, p. 16094069231183620. Available at: https://doi.org/10.1177/16094069231183620.

BNP Paribas (2021). Climate Analytics and Alignment Report. BNP Paribas. Available at: bnpp_climateanalytics_alignmentreport_final.pdf (bnpparibas.com).

Bonzon, M-L., Roberts, J. J., and Wright, J. (2024) Public participation in net zero policymaking for rural regions in the UK. University of Strathclyde. https://doi.org/10.17868/strath.00087844.

Borgström, S., Zachrisson, A. and Eckerberg, K. (2016) 'Funding ecological restoration policy in practice—patterns of short-termism and regional biases', *Land Use Policy*, 52, pp. 439–453. Available at: https://doi.org/10.1016/j.landusepol.2016.01.004.

Breyne, J., Dufrêne, M. and Maréchal, K. (2021) 'How integrating "socio-cultural values" into ecosystem services evaluations can give meaning to value indicators', *Ecosystem Services*, 49, p. 101278. Available at: https://doi.org/10.1016/j.ecoser.2021.101278.

BS4I (2021). Framework. *Business for Societal Impact*. Available at: https://b4si.net/framework/ (Accessed 14 March 2024).

Capitals Coalition (2022). Beyond ESG: Streamlining financial decision-making with a shared understanding of value. *Capitals Coalition*. Available at: https://capitalscoalition.org/wp-content/uploads/2022/06/Beyond-ESG.pdf.

Castillo, J.A., Smith-Ramírez, C. and Claramunt, V. (2021) 'Differences in stakeholder perceptions about native forest: implications for developing a restoration program', *Restoration Ecology*, 29(1), p. e13293. Available at: https://doi.org/10.1111/rec.13293.

CFA Institute (2022). Global ESG Disclosure Standards for Investment Products Handbook. CFA Institute. Available at: https://rpc.cfainstitute.org/-/media/documents/ESG-standards/Global-ESG-Disclosure-Standards-for-Investment-Products-Handbook.pdf.

Copenhagen Infrastructure Partners (2023). ESG Report 2022. *Copenhagen Infrastructure Partners*. Available at: https://www.cip.com/media/sywkkr0u/cip-esg-report-2022.pdf.

Dudley, N., Baker, C., Chatterton, P., Ferwerda, W.H., Gutierrez, V., Madgwick, J., 2021, The 4 Returns Framework for Landscape Restoration. UN Decade on Ecosystem Restoration Report published by Commonland, Wetlands International Landscape Finance Lab and IUCN Commission on Ecosystem Management.

Forest Policy Group (2023). Opportunities to increase the delivery of local community benefits and community wealth building from woodland creation in the South of Scotland – a scoping study. Available at: https://www.southofscotlandenterprise.com/media/syohwc1f/woodland-creation-cb-cwb-final-report-260623.pdf.

Forestry Commission (2023). *The UK Forestry Standard: The government's approach to sustainable forestry*. Forestry Commission. Available at: https://forestry.gov.scot/publications/1522-the-uk-forestry-standard-the-governments-approach-to-sustainable-forestry-5th-edition/viewdocument/1522 (Accessed: 14 March 2024).

GMEF (2023). Greater Manchester Green Spaces Fund – meeting the essential criteria. *GMEF*. Available at: https://www.youtube.com/watch?v=ShqhfSWvzsI (Accessed: 14 March 2024).

GMEF (no date). Greater Manchester Environment Fund Celebration of Achievements to date Annual Review. *GMEF*. Available at: https://gmenvfund.org/sites/default/files/2023-11/GMEF%20annual%20review%2022-23_0.pdf (Accessed: 14 March 2024).

Hafferty, C. (2022) 'Embedding an evidence-led, best-practice culture of engagement: learning from the evidence'. Available at: https://publications.naturalengland.org.uk/publication/5365328451469312.

Heritage Fund (2024). *Evaluation good practice guidance*. Available at: https://www.heritagefund.org.uk/funding/good-practice-guidance/evaluation (Accessed: 15 March 2024).

Heritage Fund (no date). *National Lottery Heritage Grants £250,000 to £10 million*. Available at: https://www.heritagefund.org.uk/funding/national-lottery-heritage-grants-250k-10m (Accessed: 15 March 2024).

Iniesta-Arandia, I. *et al.* (2014) 'Socio-cultural valuation of ecosystem services: uncovering the links between values, drivers of change, and human well-being', *Ecological Economics*, 108, pp. 36–48. Available at: https://doi.org/10.1016/j.ecolecon.2014.09.028.

IPBES (2022). *Methodological assessment regarding the diverse conceptualization of multiple values of nature and its benefits, including biodiversity and ecosystem functions and services*. Available at: https://www.ipbes.net/the-values-assessment (Accessed: 14 March 2024).

Kopnina, H. *et al.* (2024) 'The inclusion of biodiversity into Environmental, Social, and Governance (ESG) framework: A strategic integration of ecocentric extinction accounting', *Journal of Environmental Management*, 351, p. 119808. Available at: https://doi.org/10.1016/j.jenvman.2023.119808.

Lliso, B. *et al.* (2022) 'Nature's disvalues: what are they and why do they matter?', *Current Opinion in Environmental Sustainability*, 56, p. 101173. Available at: https://doi.org/10.1016/j.cosust.2022.101173.

Löfqvist, S. *et al.* (2023) 'How Social Considerations Improve the Equity and Effectiveness of Ecosystem Restoration', *BioScience*, 73(2), pp. 134–148. Available at: https://doi.org/10.1093/biosci/biac099.

Macdonald, C., Glass, J. and Creamer, E. (2017) 'What Is the Benefit of Community Benefits? Exploring Local Perceptions of the Provision of Community Benefits from a Commercial Wind Energy Project', *Scottish Geographical Journal*, 133(3–4), pp. 172–191. Available at: https://doi.org/10.1080/14702541.2017.1406132.

Meli, P. *et al.* (2022) 'Ecosystem restoration and human well-being in Latin America', *Ecosystems and People*, 18(1), pp. 609–615. Available at: https://doi.org/10.1080/26395916.2022.2137849.

Moreira, F., Queiroz, A.I. and Aronson, J. (2006) 'Restoration principles applied to cultural landscapes', *Journal for Nature Conservation*, 14(3–4), pp. 217–224. Available at: https://doi.org/10.1016/j.jnc.2006.05.007.

Munro, A. (2022) 'Marine restoration in Scotland: Defining potential for a shared vision' Available at: https://www.fauna-flora.org/wp-content/uploads/2023/05/FFI_2022_Marine_Restoration_in_Scotland.pdf.

NatureScot (2023) *Nature Restoration Fund – Outcomes and Eligibility*. Available at: https://www.nature.scot/funding-and-projects/nature-restoration-fund/nature-restoration-fund-outcomes-and-eligibility (Accessed: 15 March 2024).

NatureScot (no date) *NatureScot Peatland ACTION Final Report*. Available at: https://view.officeapps.live.com/op/view.aspx?src=https%3A%2F%2Fwww.nature.scot%2Fsite

s%2Fdefault%2Ffiles%2F2022-
07%2FPeatland%2520Action%2520-%2520Template%2520-%2520Final%2520Report.docx&wd
Origin=BROWSELINK (Accessed: 15 March 2024).

NatureScot (no date). *Peatland Action - Guidance - Eligibility criteria*. Available at:
https://www.nature.scot/doc/peatland-action-guidance-eligibility-criteria (Accessed: 13 March
2024).

NCVO (no date). 'Choosing your method'. Available at: https://www.ncvo.org.uk/help-and-
guidance/strategy-and-impact/impact-evaluation/planning-your-impact-and-
evaluation/choosing-evaluation-methods/choosing-your-method/ (Accessed: 19 March 2024).

O'Connor, S. (2022) *Living well with water: democratising Flood Risk Management through
reconceptualising social values*. PhD. University of Leeds. Available at:
https://etheses.whiterose.ac.uk/31045/ (Accessed: 2 February 2024).

Ostrom, E. (2009) 'A General Framework for Analyzing Sustainability of Social-Ecological
Systems', *Science*, 325(5939), pp. 419–422. Available at:
https://doi.org/10.1126/science.1172133.

Positive Luxury (no date). ESG+ 2.0 Framework. *Positive Luxury*. Available at:
https://www.positiveluxury.com/our-standards/#ESG2 (Accessed 14 March 2024).

Reed, M.S. (2008) 'Stakeholder participation for environmental management: A literature review',
Biological Conservation, 141(10), pp. 2417–2431. Available at:
https://doi.org/10.1016/j.biocon.2008.07.014.

Riverwoods (no date). *Riverwoods Investment Readiness Pioneers*. Available at:
https://www.riverwoods.org.uk/project/riverwoods-investment-readiness-pioneers/ (Accessed:
15 March 2024).

Rosa, J.C.S. *et al.* (2020) 'Planning mine restoration through ecosystem services to enhance
community engagement and deliver social benefits', *Restoration Ecology*, 28(4), pp. 937–946.
Available at: https://doi.org/10.1111/rec.13162.

Sayles, J.S. and Baggio, J.A. (2017) 'Social–ecological network analysis of scale mismatches in
estuary watershed restoration', *Proceedings of the National Academy of Sciences*, 114(10), pp.
E1776–E1785. Available at: https://doi.org/10.1073/pnas.1604405114.

Scholte, S.S.K., Van Teeffelen, A.J.A. and Verburg, P.H. (2015) 'Integrating socio-cultural
perspectives into ecosystem service valuation: A review of concepts and methods', *Ecological
Economics*, 114, pp. 67–78. Available at: https://doi.org/10.1016/j.ecolecon.2015.03.007.

Scottish Forestry (2023). Forestry Engagement and Consultation process. *Scottish Forestry*.
Available at: https://forestry.gov.scot/publications/1496-forestry-engagement-and-
consultation-processes/viewdocument/1496 (Accessed: 14 March 2024).

Scottish Government (no date). *Rural Payments and Services – Forestry Grant Scheme full guidance*. Available at: https://www.ruralpayments.org/publicsite/futures/topics/all-schemes/forestry-grant-scheme/forestry-grant-scheme-full-guidance-menu/ (Accessed: 14 March 2024).

Scottish Land Commission (2023). Community Engagement. *Scottish Land Commission*. Available at: https://www.landcommission.gov.scot/our-work/good-practice/community-engagement (Accessed: 25 January 2024).

Scottish Land Commission (2024). Delivering Community Benefits from Land. Available at: https://www.landcommission.gov.scot/downloads/65572c79e77be_Guidance%20on%20Community%20Benefits%E2%80%9316.11.23.pdf.

SMEEF (no date). 'Grants'. Available at: https://smeef.scot/grants/#engagement-equity-diversity. (Accessed: 13 March 2024).

Spoors, F., Leakey, C.D.B. and James, M.A. (2022) 'Piloting a Regional Scale Ocean Literacy Survey in Fife', *Frontiers in Marine Science*, 9. Available at: https://doi.org/10.3389/fmars.2022.858937.

Stevens, B., *et al*. (2022). Regional Land Use Partnerships: Phase 1 Process Evaluation – Final Report. *SAC Consulting*. Available at: https://www.gov.scot/binaries/content/documents/govscot/publications/independent-report/2022/10/regional-land-use-partnerships-phase-1-process-evaluation-final-report/documents/regional-land-use-partnerships-phase-1-process-evaluation-final-report/regional-land-use-partnerships-phase-1-process-evaluation-final-report/govscot%3Adocument/regional-land-use-partnerships-phase-1-process-evaluation-final-report.pdf.

Tedesco, A.M. *et al*. (2023) 'Beyond ecology: ecosystem restoration as a process for social-ecological transformation', *Trends in Ecology & Evolution*, 38(7), pp. 643–653. Available at: https://doi.org/10.1016/j.tree.2023.02.007.

Thomas, D. (2020). *Understanding the social landscape for restoration | Cambridge Conservation Initiative*. Available at: https://www.cambridgeconservation.org/understanding-the-social-landscape-for-restoration/ (Accessed: 28 February 2024).

Appendix A: Definitions and Source to Sea Thinking

Clarifying community definitions & purpose for engagement

It is prudent to clarify definitions of terms that will be used throughout this report. The word community can be ambiguous, meaning different things depending on the context. Hannon *et al* (2024) have provided the working definition of community as:

> "*A collective of people who are connected through a shared sense of identity, which is distinctive either in terms of: a) place, such as a defined geographical boundary; and/or b) practice, such as shared interests, motivations and values*."

Communities are often talked about as a homogeneous group, but it is important to note that even within community groups, values and interests can vary. This makes pinning down community benefits difficult. Throughout this report, communities will refer to either geographic communities, communities of interest, or both.

Existing guidance related to community benefits within ecosystem restoration usually refers to communities of place as those most impacted. The Scottish Land Commission guidance says that community benefits are proactive, planned, and deliberate positive impacts for the geographic community arising from nature capital restoration projects (*Scottish Land Commission*, 2024). In a report from the Forest Policy Group around woodland creation, community benefits are described as "more specific than the more widely studied 'social benefit'" being for the local geographic community which are intentional and jointly planned (*Forest Policy Group*, 2023). Benefits can be tangible or intangible. The Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) 2022 report states that there should be a push to understand the ways in which nature matters to people over and above its use value to us.

There are also the lesser discussed disbenefits or disvalues that can stem from ecosystem restoration. These can include things such as displacement or loss of agricultural land (Lliso *et al.*, 2022). These disbenefits are often hidden from glossy project reports but should be elicited to allow for their consideration and mitigation within restoration efforts. The understanding that ecosystem restoration is not always inherently good for everyone makes the discussion of benefits and disbenefits subject to power dynamics. When adding in spatial and temporal aspects of benefits and disbenefits, the complexity expands. Who controls who will benefit from the project, who may not benefit, and who is included? It is a question of equity and social justice. And it's not an easy one.

However, identifying appropriate cultural and community benefits ultimately needs to be defined through project co-design with communities themselves, which is where community engagement comes in. Community engagement is a process which involves groups playing an

active role in decisions that impact them (Reed, 2008; Hafferty, 2022). Engagement includes a range of activities including consultation, communication, and participation. Numerous frameworks have been published about how to properly engage communities in nature restoration projects (*Scottish Land Commission*, 2023; *Scottish Forestry*, 2023; Hannon *et al.,* 2024). Engagement can be thought of as a process instead of an outcome, with constant reflection needed to refine approaches.

Shown in Figure 7, community support for and perceived benefits of a nature restoration project are shaped not only on the project's process of engagement but also community member's individual and shared values, historical context, observations, culture, and worldview (Bennett, 2016). This also reiterates the point that communities are not a homogeneous group with static interests and perceptions, making their values and perceptions difficult to measure, quantify, and monetise (Thomas, 2020). Including communities in decision making is an example of procedural justice[17], leading to better restoration outcomes and providing an opportunity to dip into local knowledge to improve the project (Löfqvist *et al.*, 2023).
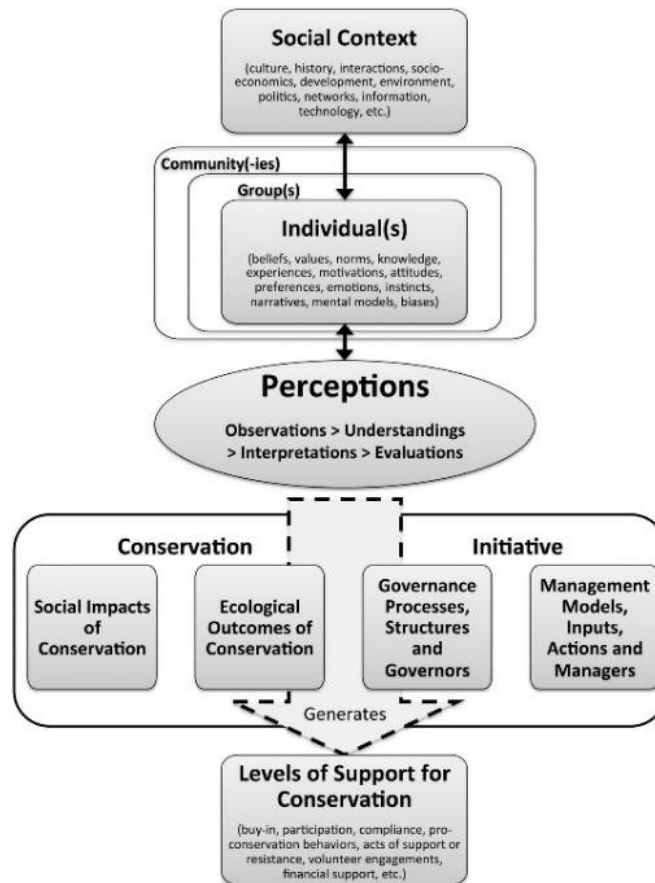

Figure 7: Diagram showing influences on whether conservation is supported. Source: Bennett (2016)

[17] Procedural justice indicates fair representation in decision-making by those who are impacted.

There are risks to managing engagement incorrectly. If the engagement process is poorly defined and the benefits do not reflect the needs of the community, there can be poor perceptions of the project (Macdonald, Glass and Creamer, 2017). Further, perceived illegitimacy of the processes can exacerbate 'engagement fatigue' and lose the trust of communities, many of whom have invested time in participating (Bonzon *et al*., 2024). Therefore, there can be hesitancy in restoration project teams wanting to approach this since it "might be a dead end and cost them the trust of their stakeholders." (Stevens *et al*, 2022). Conversely, good engagement can lead to positive associations with nature restoration projects. According to a FIRNS-funded report, effective community participation is bespoke, coordinated, lasting, equitable, and inclusive among other attributes (Hannon *et al*, 2024). If managed well, nature restoration projects can facilitate more positive sentiments and be more successful in the long-term.

Socio-ecological Source-to-Sea thinking

For a Source to Sea Fund to truly be innovative and integrate community benefits, it should aim to approach ecosystem restoration in a way that is contrary to how things have been done historically. Traditionally, and still largely today, nature restoration in Scotland has been focused on immediate ecological outcomes such as trees planted, or hectares created with less of a focus on social impacts (Munro, 2022). This is likely because the ecological and social sciences have developed independently and so do not easily combine (Ostrom, 2009). Table 4 illustrates the differences in approaches between ecological and cultural landscape restoration, mainly highlighting spatial scale and value mismatches.

Table 4: Difference between ecological and cultural landscape considerations, Source: (Moreira, Queiroz and Aronson, 2006)

Ecosystem	Cultural landscape
• focus on a single ecosystem and fine spatial scales; • biodiversity is main objective, along with sustainable economic productivity; • may not be effective for restoring some ecosystems or species populations that depend on landscape structure; • focus on habitat/ecosystem patches; landscape composition much more important than configuration; • always aims at the improvement of degraded areas and maintenance of native ecosystems; • alien species considered undesirable; • management actions may rely on modern or traditional techniques; cost-effectiveness of the techniques is the most important criterion for selection.	• focus on mosaics of land uses/ecosystems at broader spatial scales; • main objectives include cultural and scenic values, as well as biodiversity and economic productivity; • may be very effective in restoring some ecosystems and species populations that depend on landscape structure; • focus on landscape composition and configuration; • may include preservation of degraded patches (from an ecosystem perspective) and even destruction of native ecosystems; • may include maintenance of alien species; • traditional land management much more valuable than modern techniques.

As mentioned in the previous section, perceptions can impact community acceptance of restoration projects. Therefore, since there are different perceptions of what is considered a

"natural" ecosystem, it is likely that ecological needs as determined by natural scientists won't always align with community needs. There can then be a possibility of tension when these two groups view the same landscape in two different ways. For example, conservationists may see "degraded forest land" while "local communities local communities may perceive the same landscape to be prosperous agricultural land" (Löfqvist *et al.*, 2023). Similarly, the fact that an ecosystem may provide certain ecosystem services, doesn't mean that they are perceived as benefits by a community (Scholte, Van Teeffelen and Verburg, 2015). This is because a landscape (and seascape) is not just about its services to humans but also its subjective meaning (*ibid*).

This traditional approach to restoration creates a siloed and incomplete view of the problem. Instead, a source-to-sea approach acknowledges that people and biophysical matter are connected through the medium of water, viewing landscapes and seascapes as complex socio-ecological systems. Therefore, restoration should be more of an iterative, inclusive and holistic process involving several projects working together to realise wider benefits (Tedesco *et al.*, 2023; Kellock *et al.*, 2023). This is illustrated nicely in Figure 8.
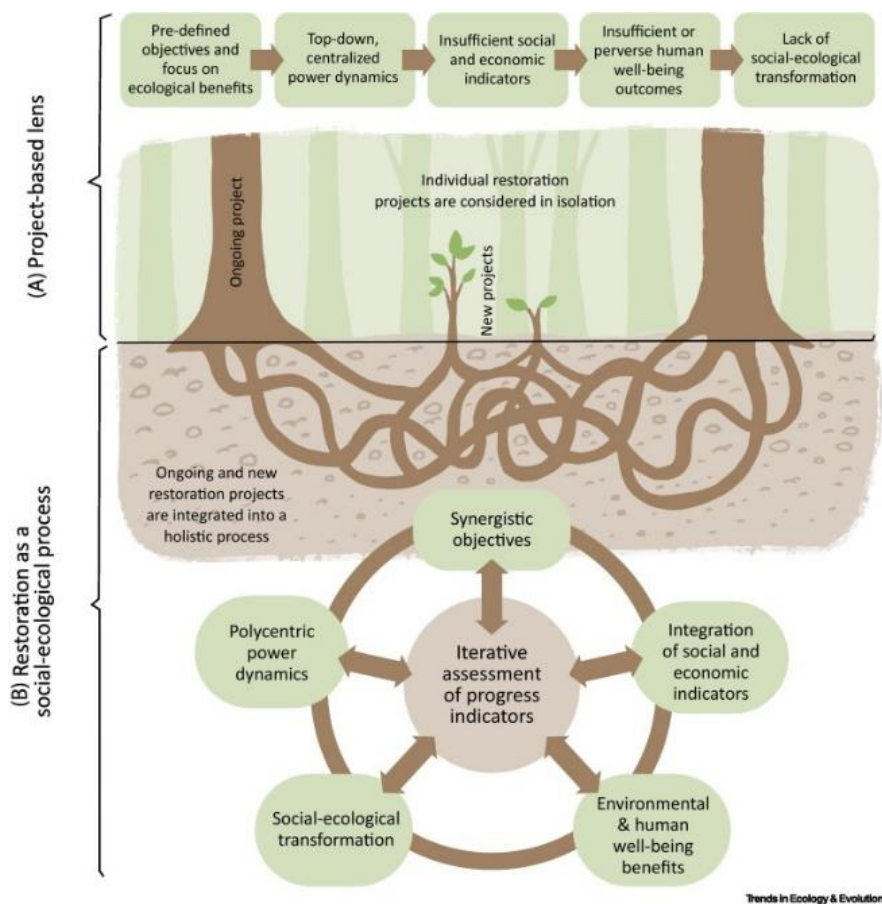

Figure 8: An illustrative depiction of restoration as a socio-ecological process. Source: Tedesco, *et al* (2023).

How can we start to move our thinking this way? One way is through promoting mechanisms that promote behaviour change such as knowledge sharing, education, and hands-on participation in restoration work (Leakey, 2022). This could include pursuing ocean literacy assessments, as has been done in the Fife Local Authority area, to identify what local communities value about the oceans and amplify their voices (Spoors, Leakey and James, 2022). Understanding knowledge of and preferences for ecosystem services is also seen to help link ecological and social outcomes and benefits of wider restoration (Rosa *et al.*, 2020; Alba-Patiño *et al.*, 2021).

Pursuing socio-cultural surveys and perception elicitation alongside 'evidence-based' ecological surveys for larger projects can help understand possible value mismatches, provide additional context, and offer areas of consensus building (Iniesta-Arandia *et al.*, 2014; Breyne, Dufrêne and Maréchal, 2021). Further, creating logic models have been suggested as a good way for project teams to indicate probabilities and uncertainties of success based on ecological inputs and social activities, for example, can ultimately help determine risks earlier and lead to long-term success (Tedesco *et al.*, 2023). Integrating communities into restoration work through the project cycle may add complexity but that's all the more reason for transdisciplinary approaches and partnerships to deliver ecosystem restoration initiatives (Meli *et al.*, 2022).

Appendix B: Additional Fund Contributor Considerations and Examples

This section provides a brief overview on the types of social indicators used by those who might be interested in contributing to a Source to Sea Fund. It is important to understand because contributions to the fund will ensure its longevity in being able to support restoration work on the ground. Within ESG, social and governance aspects are often neglected in favour of environmental goals. While the 'E' tends to be the most focused on, with the 'S' considered to be the most difficult to analyse (*BNP Paribas*, 2021). The 'S' usually refers to 'inward looking' considerations such as workplace corruption, discrimination and safety and also 'outward looking' considerations such as community impacts. Given that most ESG reporting guidelines provide incomplete coverage around biodiversity metrics and indicators (Kopnina *et al.*, 2024), this means that social metrics and indicators may be even less developed. What matters to potential private contributors and how do they measure social impact? Some examples include:

- **Aviva**, which has been very active in funding flood mitigation projects in Scotland, uses metrics such as 'estimated community members made more flood resilient', 'number of employee hours spent volunteering', and '£ donations' (*Aviva*, 2022). They are also targeting community engagement by partnering with the WWF on projects such as Restoration Forth, including helping to support recruitment of a community engagement officer and increasing educational opportunities (*Aviva*, no date).

- **Copenhagen Infrastructure Partners** is focused on sharing financial benefits with local communities and engaging with them (*Copenhagen Infrastructure Partners*, 2023). Their ESG report includes mostly quantitative indicators including 'percent of households powered' and 'number of stakeholder engagement activities' as well as a few qualitative quotes around impact.
- **Glenturret Distillery**, Scotland's oldest working distillery, has core values in promoting biodiversity enhancement and community participation. Their impacts include providing funding and employment opportunities to the areas they operate in. The distillery has expressed interest in the Riverwoods Nature Finance projects, supported by the Perth & Kinross Countryside Trust, where a central element is around community benefits (*Riverwoods*, no date). They have also recently become Butterfly Mark certified, which has a social component (*Positive Luxury*, no date).
- Considering improving biodiversity through the planning system, it appears that Scotland is developing an approach to assessing biodiversity value. This value would be assessed in quantitative terms and build on the current planning policy of "Positive Effects for Biodiversity" and through measures detailed in National Planning Framework 4 (NPF4). In time, it is possible that developers could look to Source to Sea as a place to restore nature impacted through biodiversity 'units.' This is a new concept practiced in some European countries, and if enacted in Scotland it could present obligations to engage the community. Work is also underway on defining a marine 'nature positive' policy as well.

Examples of some social reporting frameworks that contributors may use to understand impact include:

- **Business for Societal Impact** (B4SI) helps companies increase their ESG scores through their input, output, impact framework which stresses change in societal indicators. Their indicators include number of projects, people trained/reached, % of people claiming that they experienced an improvement, and money spent (*BS4I*, 2021). The model can then aggregate projects across geographies.
- **The Capitals Approach**, including the Social & Human Capital Protocol, from Capitals Coalition is a broader ESG & decision-making framework which helps companies understand the changes in natural, social, human, and produced capital with business practices and the dependencies across them. They aim for a standardised, more holistic approach to capital accounting. Their indicators are "objectively verifiable" and can be quantitative or qualitative. The Social & Human Capital Protocol notes that "when social and human capital impacts and dependencies use comparable values, you can employ them alongside other business information" (*Capitals Coalition*, 2022).

Potential Source to Sea Fund contributors are clearly interested in supporting communities, but the metrics and goals they use are largely quantitative, standardised, aggregated, and outcome-

based. The CFA (Chartered Finance Analysts) Institute which sets standards for reporting on ESG investment, discusses the need for social and environmental "impact objectives" that are measurable or observable, monitored and evaluated (*CFA Institute*, 2022). But social and environmental phenomena are not simple – they are complex, interconnected, and uncertain (Adams and Abhayawansa, 2022). While organisations like the Capitals Coalition are trying to drive more holistic monitoring through their Capitals Approach, the protocols themselves are still quite siloed.

ESG donations also tend to address material[18] concerns for a company, which may lead to top-down or 'demand driven' projects of interest which may or may not align with ecological or social needs on the ground. Even if individuals within the contributing organisations understand the importance of the ecosystems they impact and are impacted by, the profit-driven system in which they operate does not lend itself to large-scale unrestricted contributions or altruistic giving for the intrinsic value of nature. There is an incentive to invest in things that are easy and low-risk because they are less expensive. So, the risk is that community benefits that are more difficult to measure may be left out or unincorporated into restoration planning decisions.

Appendix C: Additional Interview Methodology Details

Interview Script

Begin interview by providing background on wider FIRNS-funded Source to Sea project, who I am/my background, and the key goals of my internship project, including intended outputs and that their views will feed into a thematic analysis to inform recommendations on Source to Sea funding mechanism to integrate community benefits and engagement. Ensure interviewees that they will be kept anonymous and that their data will be deleted upon project completion. Confirm note taking / audio recording consent.

Main project purpose: Understand the ways in which a Source to Sea fund could support meaningful community benefits and engagement within the projects it funds

Key themes to cover:

- Past nature restoration project involvement and specific community groups, engagement, benefits, and disbenefits that have come from that (easiest to get specific case study examples)
- Barriers around community benefits and engagement within marine/coastal/river/river catchment restoration projects

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[18] Materiality within ESG means whether the impact in question is relevant to a company's ESG rating, goals or strategy.

- Possible entry points and barriers to a Source to Sea fund including/supporting community engagement and benefits within funding mechanisms
- Considerations around trade-offs in reporting requirements and capacity and community benefit apportionment
- Sentiments towards emerging natural capital markets and private finance flowing into nature restoration, including anything the fund should consider with regards to community benefit and engagement

Possible Questions

Past Restoration Work & Community Participation & Benefits

- Can you tell me a bit about the restoration work and projects that you've been part of? (i.e. type, size, funding source and amount, community-led projects, projects co-developed with community etc)
- When thinking about a specific project you've worked on as an example, which communities, if any, would be relevant from your perspective and why?
- What level and type of community engagement have you been part of within this/those projects, if any?
  - In what ways, if any, did characteristics of the community impact your engagement strategy?
- What benefits have come from this/these projects, if any, from your perspective?
  - What indicators did your team use to establish them as benefits?
  - What were the spatial and temporal elements of these benefits? (take a few they have named as an example)
  - Were these community benefits deliberately sought as an outcome of the project or were they incidental? Do you think there would have been a meaningful difference had there been a deliberate intent to incorporate them?

Barrier and Disadvantages and Systems Thinking

- Were there barriers to integrating community engagement/participation or benefits into restoration projects and if so, what were they?
- Were there any communities or groups/individuals within the same community who experienced a disadvantage from the restoration work?
  - How, if at all, was this addressed and what considerations were made?
- Were there any stakeholder power dynamics that you observed within past nature restoration projects? What factors may be driving this?
- In what ways, if any, does your restoration work take into account positive or negative community impacts that flow beyond your restoration site and geographic community?

Past Reporting Requirements & Transition to talking about STS Fund

- Have you been required to report on community benefits/engagement in the past by funding bodies?
    - If so, what "metrics"/KPIs were used?
    - What was your experience with that?
    - In your opinion, is there a better way to do this?
    - Do you think metrics involving community benefit be around the process or outcome?

Possible Entry Points & Barriers of STS Fund Supporting Comm Benefits and Engagement

- How do you think a Source to Sea fund could support meaningful community benefits and engagement within project work? (i.e. clearer reporting requirements/frameworks, toolkit, long-term funding, less fund restriction, help with capacity building)
    - What barriers may exist to a fund supporting meaningful community benefits and engagement within project work?
- What, if any, considerations should the fund consider around helping projects to balance ecological restoration with social benefits and integration? Are there implications if these are not balanced? (i.e. reporting requirements, funding amount, capacity on the ground, etc)

Nature Finance Generally

- The STS fund is currently being designed so it is not certain whether it will be funded through philanthropic donations, blended private/public, or through larger scale private funding (i.e. Biodiversity Net Gain or ecosystem service credits). What are your general feelings towards the nature finance funding growth within nature restoration? Why?
    - How, if at all do you think that increased private investment could affect community benefit or engagement within nature restoration?

End of interview.

Appendix D: Additional Interview Information

Table 5: Summary of community inclusion challenges

Challenge	Quotes[19]	Most impacted project types
Low turn-out numbers at participation events	*"Citizen science involves more technical knowledge and that's hard to get people. Physical work like path building is also hard to get people"*	General challenge, but particularly rural
Limited project team capacity	*"School programmes is based on funding and availability, it's trying to develop an appreciation of nature and I would like to do more of that, it's just a capacity issue"*	Rural, small projects
Challenging balance and misaligned goals: Community involvement versus ecological restoration	*"There seems to be an enthusiasm for community groups and that noise in the background is hard to someone who is really trying to do the right thing and some of these groups don't have the environmental benefit right at all."*	Organisations with an environmental priority and previous funding sources
Short funding timescales	*"So, you spend all this time building a community and then you can't get funding to continue it and the community thinks you've ducked out...it takes a lot of time to build those relationships, it's a lot of continued effort so getting that into the funding system is tricky I think."*	General challenge
Lack of sufficient funding	*"At present, we're going for funding for NLHF for invasives and that will include attending country fairs, education in schools, and volunteers. It's good when they can include it but need the funding to do so. We need the funder to be happy for that engagement to happen and to support it."*	General challenge
Inaccessible environments	*"Some of the work is still inaccessible and it entails handling the cold and being able to snorkel and having a good wetsuit... very limited in the people who can help with that"*	Marine
Land-use power dynamics	*"Getting engagement and input from community can slow the process so there has to be a balance and while that's good to get the support, it's really up to the landowner and hoping that aligns with the community."*	River/Terrestrial
Challenges with community benefit reporting	*"Participation metrics look good to a funder but don't actually tell you anything."*	General challenge

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[19] Since not all interviews were audio recorded, notes were taken instead. Therefore, some of these quotes may differ slightly from what was said verbatim. However, the overall meaning has been preserved.

Table 6: Source to Sea Recommendations from Interviews – Additional Quotes

How S2S could support communities	Quotes
Proportionate requirements and reporting	*"Community benefit and engagement can be done but it has to be realistic. You can't just blindly request volunteers in every situation."* *"If we're doing large woody structures to improve in-stream habitat, then no, I wouldn't do it [consult with community]. It's a lot of practical work and it wouldn't impact people very much."* *"More fund guidance around what aspects they think indicate social change so that there are more clearly defined goalposts to work from. That would be really helpful."* *"If the bar is set too high and is virtually unachievable then I would be dissuaded from applying for the funding. This is often a common issue with government funding."*
Source to Sea as a connection, partnership, and support hub	*"We get a bit siloed."* *"Linking with other sectors or other areas of knowledge and valuing different elements of a projects like scientific and social knowledge and honoring local culture and history – maybe this is an entry point in funding mechanisms, like intersection between local cultural heritage and creative sectors and restoration."* *"NatureScot has a community monitoring handbook but the data handling just isn't there and the community groups I've spoken to, no one is inputting the data. Maybe this Source to Sea fund can be a data handler or provide a specific format that they encourage projects to do. All this work is happening but there is a lack of centralisation. It could provide a tool for grantees and feed back to NatureScot."*
Long-term funding to support long-term community benefits	*"There are so many reasons that a project would change so being willing to flex on the project and flex on when the money has to be spent by would be great. This is a problem across all funds at the moment."*
Nature finance should be pursued but not without Just Transition considerations	*"A lot of organisations won't apply for SMEEF because it's funded by private investors. If Source to Sea is doing this, they have to be so transparent about who is putting into this fund and this process has to be clear to understand. Clear communication is crucial... We're delighted that these investors are willing to give, but who they are, what their ethos is, what their environmental angle is is so important"*

Appendix E: Additional Details from Recommendations

Proportionality

- While there aren't any hard and fast rules to determining what "large" and "small" projects are, here are some considerations from existing funds. For example, Scottish Forestry doesn't recommend consultation for under 2 hectares of planted trees because the expected impact on communities is relatively small. Further, NLHF have thresholds for projects below £250,000 with different considerations than for those above. There is no single recommendation for an adequate "amount" of community engagement for the fund to require. This can only be determined through an iterative approach of trial, error, and reflection. It might be necessary to start smaller by piloting engagement approaches based on local context and community needs and giving time to learn.

Explore reporting frameworks

- Frameworks such as the 4 Returns Framework and other approaches which capture economic, social and ecological elements of projects are a good place to start. Interdisciplinary socio-ecological approaches could include socio-ecological network analyses (SENA) to understand dependencies (Sayles and Baggio, 2017) or logic frameworks or models to highlight risk and uncertainty (Tedesco *et al.*, 2023). Ocean literacy surveys, interviews, socio-cultural surveys (Iniesta-Arandia *et al.*, 2014) alongside ecological one, as well as deliberative methods are other techniques that could be used to get a greater understanding of the more intangible social impacts that restoration can bring and therefore, lead to better planning and decision making. The National Council for Voluntary Organisations (NCVO) website has more information on pros and cons of different quantitative and qualitative evaluation methods (*NCVO*, no date).