Investment Potential Summary Report

Produced by Fisheries Management Scotland as part of the project “Developing a portfolio of river restoration investment packages and delivery support measures for the Source to Sea Fund”

April 2025

This project is supported by The Facility for Investment Ready Nature in Scotland (FIRNS). Delivered by NatureScot in collaboration with The Scottish Government and in partnership with the National Lottery Heritage Fund.

Contents

1. Introduction 2
1.1 Enabling policy environment 4
2. Establishing the river restoration supply side 5
2.1 The Method 6
2.2 Establish high-integrity river restoration project pipeline 8
2.3 Gain a better understanding of the restoration process 13
2.3.1 Critical concerns with project supply side 14
2.3.2 Key solutions identified 16
3. The case for attracting corporate interest 21
4. Moving towards market readiness 24
4.1 Market test Fund outcomes in partnership with contributors 24
4.2 Continue to develop Fund's governance structure and approvals process 25
4.3 Build a sustainable restoration project pipeline 25
Appendix 27

A Word Cloud showing survey responses about the purpose and objectives of 'ready-to-go' river catchment restoration projects.

1. Introduction

The overarching goal of this project was to assess the 'investment-readiness'[1] potential of the supply side of river catchment restoration work in Scotland to support the establishment of a River Catchment Restoration Fund (the Fund). The Fund is an ambitious mechanism to facilitate private investment into Scotland's river catchments to ensure long-term benefits for nature and people. Scotland's 125,000km of rivers and 30,000 lochs and all the life they support are under threat. For example, nearly two-thirds of Scotland's rivers have insufficient tree cover to protect them from climate-induced warming[2]. This is among a range of other pressures arising from freshwater and land uses. As the impacts of climate change and environmental degradation have been felt increasingly over the decades, there has been a movement to unlock private finance, such as through corporates' Environmental, Social and Governance (ESG) or Corporate Social Responsibility (CSR) interests, to support restoration work alongside more traditional public grant funding.

There exists an inspiring opportunity, then, to address these pressures through river catchment restoration. Rivers are dynamic, flowing systems that connect the land with the sea. Therefore, river catchment restoration[3] can improve conditions not only at the site, but also upstream and downstream. Since a river catchment is an ecologically defined area (as opposed to council boundaries) and can be tied into cultural identity, its regeneration presents an attractive proposition for corporates and private philanthropy who have an interest in protecting Scotland's rivers and their catchments for the long term. See Figure 1 below for a depiction of the proposed Fund structure and a few examples of projects that could be supported by the Fund. This collection of 'investment-ready' projects will be referred to as the '**project portfolio**.'

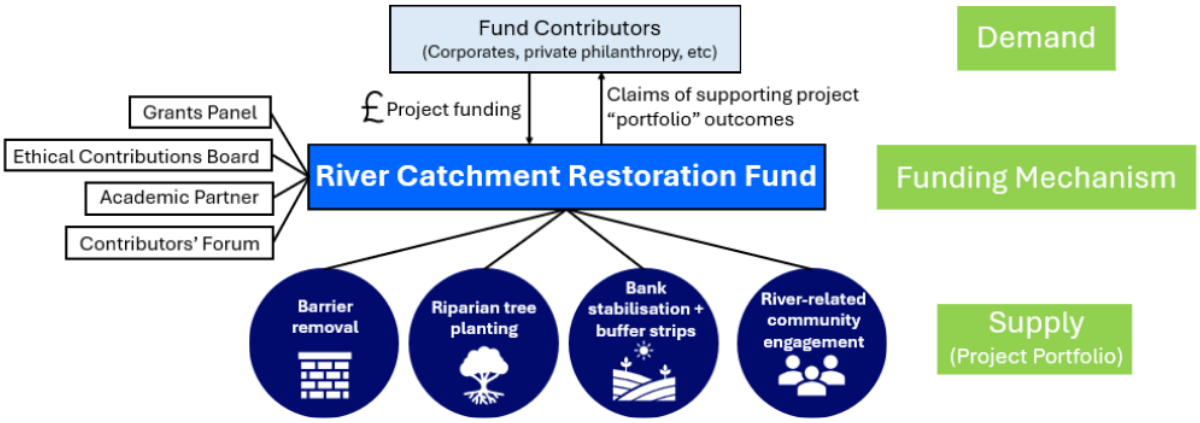


Figure 1 Proposed structure of the River Catchment Restoration Fund, modelled from the Scottish Marine Environmental Enhancement Fund (SMEEF)

[1] In this case, an 'investment-ready' project was one that would be ready to deliver in the next 6 months to a year, reduce a priority pressure within the catchment, and demonstrate benefits to river ecosystems and/or the local community.

[2] Where to plant trees to protect rivers under climate change (Scottish Government)

[3] By river catchment restoration, we mean restoration work that is undertaken in a catchment with a specific objective to improve river and river-adjacent ecosystems. This could include work within the river itself, in the headwaters, or on land adjacent to rivers.

This report provides a summary of the investment potential for river catchment restoration activities in Scotland from a focused cohort of project developer stakeholders with a keen interest in river and river catchment restoration.

This report is intended to provide a steer on how to build a sustainable river catchment restoration project portfolio pipeline, to inform the Fund's future governance structure and approval processes, and to serve as a basis for subsequent marketing efforts to drive Fund contributions.

Ultimately, the ambition is for the Fund to support a suite of diverse, high-quality restoration projects across Scotland that are locally relevant, benefit rivers and people, and provide the opportunity for the private sector to contribute to these urgently needed actions. To do this, the Fund must be fit for purpose, supporting both the project developer side and contributors' interests. This report will focus on what is needed from the **project developer's side** and explore what the Fund's key selling points to contributors could be.

The extensive engagement work for this FIRNS project was carried out by Fisheries Management Scotland (FMS) between May 2024 and November 2024. FMS is a membership organisation comprising 40 District Salmon Fishery Boards (DSFBs), the River Tweed Commission, and 27 Rivers and Fisheries Trusts[4]. The insights which emerged from engagements and workshops conducted with FMS members and two non-member organisations[5] and workshops with river restoration stakeholders, underpin much of the content of this report. The focus on FMS membership is suitable as it represents vast coverage of river and fisheries management across Scotland and includes a range of organisational sizes and experience with river catchment restoration. Additionally, these river catchments are covered by a suite of Fishery Management Plans[6] addressing locally-relevant river catchment restoration actions presented in a standardised format, offering a streamlined process for identifying projects for the portfolio.

[4] DSFB & Trust map – Fisheries Management Scotland
[5] The Spey Catchment Initiative and Tweed Forum
[6] Fishery Management Plans National Dashboard and corresponding StoryMaps

1.1 Enabling policy environment

The Scottish Government has stated that it is committed to addressing the twinned biodiversity and climate challenges while realising a Just Transition[7]. Acknowledging public purse constraints, the Scottish Government has supported the development of natural capital markets in Scotland to help fill that gap. With the November 2024 launch of the Scottish Government's Natural Capital Market Framework[8] and through investment in the Facility for Investment Ready Nature in Scotland (FIRNS) programme, the Scottish Government, and its agencies, have shown their commitment to developing projects, mechanisms, and markets that facilitate greater amounts of responsible private money coming into restoration for the benefit of ecosystems and communities. Further, in the Scottish Government's November 2024 publication of their Biodiversity Delivery Plan,[9] Objective 5 underscores the importance of establishing and growing responsible nature finance markets to aid in the delivery of this plan.

Finally, the establishment of the Scottish Marine Environmental Enhancement Fund (SMEEF)[10] in 2022, on which the concept for this Fund is modelled, has wide public body support and is housed within NatureScot. SMEEF has been successful in securing private funding for marine and coastal enhancement work[11]. And while there is a lot to learn from SMEEF, marine restoration differs from river catchment restoration in several notable ways, making understanding the river catchment restoration project supply a crucial piece of the Fund's development journey.

[7] Climate change (Scottish Government)
[8] Scottish Government Natural Capital Market Framework
[9] Biodiversity Delivery Plan 2024 to 2030
[10] Scottish Marine Environmental Enhancement Fund (SMEEF) website
[11] SMEEF Latest Impact report

2. Establishing the river restoration supply side

To establish a pipeline of 'investment-ready' river restoration projects, it was important to have a suitable approach. See Figure 2 below for an outline of the process, highlighting the why, what, how and where of the approach taken.

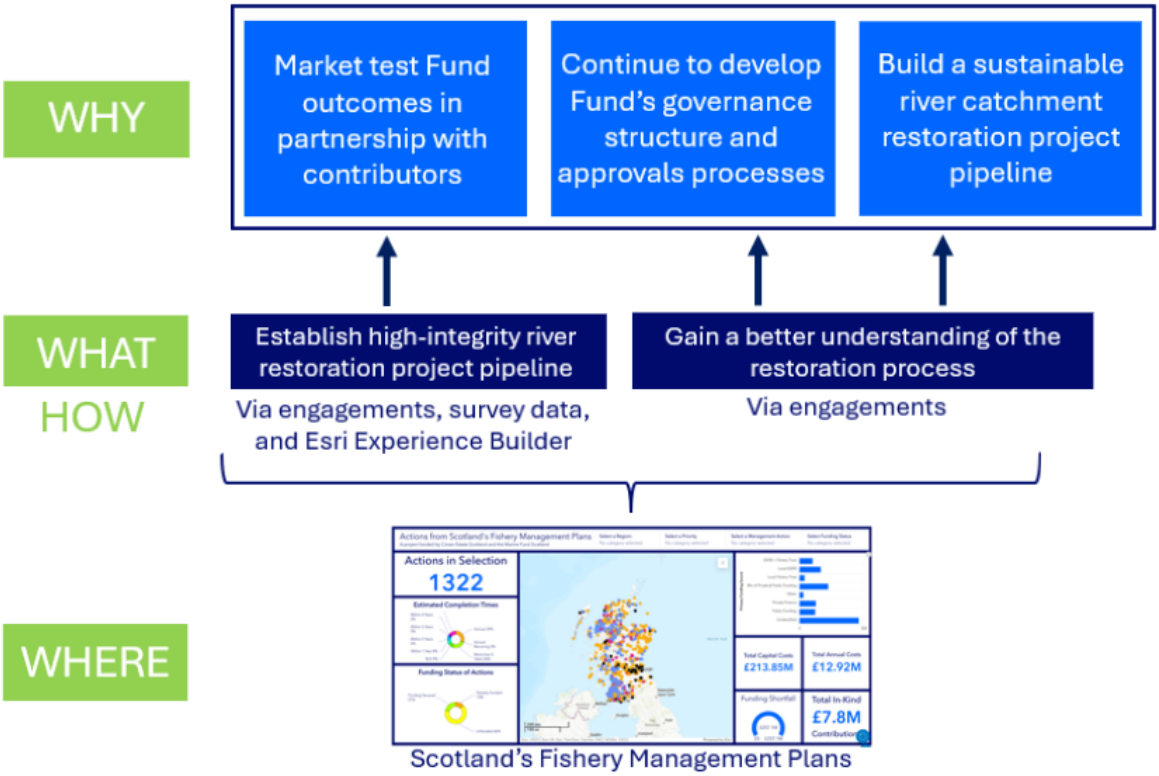


Figure 2 The approach taken to meet project goals

A key output of this approach was to articulate a river restoration project portfolio and pipeline. For the purposes of this report, project portfolio will refer to the collection of projects that are 'investment ready' or 'ready to go.' The project pipeline will refer to all projects, including those that are further out, requiring various actions or resource to get them to the 'ready to go' stage. Beginning with the actions laid out in the 44 Fishery Management Plans, FMS conducted engagements and collected survey data across Scotland to identify a portfolio of high-quality projects covering a wide range of approaches to river catchment restoration. The ambition here was to understand the scales and types of projects that could be supported by the Fund once up and running. In other words, the pipeline would supply a steady stream of projects for the Fund to support, with the portfolio serving as the initial offer to contributors.

The engagements also facilitated another key element which was to better understand the restoration process, including nuances in project type, project size, geographic location, and organisation type. Challenges and opportunities experienced within the river and river catchment restoration process were discussed, as were solutions to these challenges. Finally, engagements created space for project developers to share thoughts and ask questions about the River Catchment Restoration Fund as a concept.

2.1 The Method

In March 2024, FMS members finished preparing 5-year Fishery Management Plans[12] comprising actions aimed at restoring Scotland's rivers and fish populations while educating the public on their importance. Hence, these plans were a useful place to start to best understand the national scope for restoring Scotland's rivers, utilising the skills of a cohort of people who know their river catchments well. Through extensive scoping and piloting, FMS developed an engagement method and liaised with the membership through a series of on-site visits. Prior to the engagement or interview, organisations were sent an email to brief them on what they could expect from the engagement session. This email included:

- A video detailing the purpose of the engagement
- An initial assessment on how 'ready' each relevant action in their Fishery Management Plan was based on the information provided against each action
- A criteria matrix (Figure 3 below) with project attributes by which to assess readiness. Please note that this criteria matrix was meant as a first step and will be revised going forward.

Broad qualitative criteria determining FMPs' actions readiness for delivery

	State of delivery readiness		
Criteria	**Ready (within a year)**	**Almost (2-3 years)**	**Further Out (3+ years)**
Permissions	Licences, consents, approvals as needed are in place or have been discussed with the relevant authority and likely to obtain permissions within the year. • E.g. NatureScot, SEPA, local authority	Licences, consents, approvals as needed are known, but not yet in place as it is too far out.	Licences, consents, approvals as needed are not known.
Landowner	Landowner permission/s is/are in place	Landowner permissions are not in place	Landowner permissions are not in place
Project scope	The project is scoped and described in a way that clearly communicates the project strategy, project goals, and how to achieve them. • E.g. Consultant reports, location, design, management and monitoring plans, specification, project outputs	Project scope is broadly described but goals and strategy are not quite clear.	Project scope is only a rough idea.
Project itemisation and costs	Project costs are itemised and costed, with reasonable confidence. Funding gaps are scoped • E.g. Materials, contractors, project management, monitoring post-project	Total project costs are broadly known based on similar costs elsewhere	Project has not been costed or only very broad estimates.
Capacity to deliver	**The FMS member lead** has capacity on its own or has arrangements / partnerships agreed and in place with others to deliver.	**The FMS member** lead knows the delivery arrangements needed but they are not yet in place.	**The FMS member lead** still need to work out the delivery arrangements considering its own and others capacity to deliver.
Baseline and monitoring	The monitoring baseline is known or straightforward to establish and monitoring systems are in place or straightforward to put in place to assess impacts.	The monitoring baseline and monitoring systems are not in place to assess impacts. However, they know what methodology they might use.	Baselining and monitoring have not been much thought about.
Community	Community engagement has been or will be incorporated in a way that is proportional to the project scope. This is done in a way that reflects the needs of the community.	Community engagement / benefit has not been thought much about yet but could be in time for the start of the project.	Community engagement / benefit has not been thought about yet.
Timescales	Good confidence that the project is "shovel ready". Lead in time is possible within the year	Low confidence that the project is "shovel ready" though lead in time feels possible with 3 years	Lead in time feels some way off 3+ years

Figure 3 Draft criteria determining readiness for delivery

[12] Fishery Management Plans National Dashboard and corresponding StoryMaps

Prior to the engagement session, FMS read the organisation's Fishery Management Plan StoryMap[13] and categorised each relevant action in the Plan using a "red, amber, green" system. See Table 1 below. Reading through the StoryMap helped FMS to better understand the catchment's context and local pressures prior to the engagement visit.

Table 1: "Traffic light" system used to determine readiness

Green	The project is generally ready-to-go in the next 6 months to a year.
Amber	The project is likely 2+ years away from being ready to deliver.
Red	The project is likely 3+ years away from being ready to deliver.

Engagement interviews were conducted using a semi-structured interview approach which touched on general themes but largely followed the interviewees' interests and promoted conversational flow. There was intentional flexibility built into the session to allow individuals to voice concerns and engage in two-way learning by asking questions about the Fund's development or other nature finance opportunities. The benefit of this approach was that interviewees tended to feel more engaged throughout and empowered to discuss what was most relevant to them in the context of river catchment restoration.

The typical interview flow was:

- Project background and introductions
- Reviewing management actions in the Fishery Management Plan (FMP) to discuss whether FMS' initial assessment on 'investment readiness' was accurate and to discuss the restoration process more generally. Updates and notes were taken as needed. Interviewees were told that they shouldn't feel tied to the FMP and that they could discuss projects that weren't included in these plans.
- Community benefit and engagement action within restoration work
- Sentiments and questions about the River Catchment Restoration Fund

Any projects identified as being 'investment ready' were recorded during the engagement. A follow-up survey link was sent following the interview so that projects could be added to the portfolio. Surveys were filled in using Survey123 which is an Esri[14] application and allows participants to draw polygons on a map to indicate restoration location. The survey was connected to Esri's ArcGIS Online mapping portal so could seamlessly convert the survey data into a dashboard visualisation in Esri's Experience Builder tool. Qualitative data collected during interviews was transcribed and coded thematically using the software Taguette. This meant that results went directly into the project pipeline, - a key deliverable of this FIRNS project.

Between July and November 2024, a total of 54 people across ~90% of Scotland's river districts were engaged. This represented a total of 27 interviews. See Table 7 in the Appendix for the full list of organisations that were interviewed by FMS. All but four of these engagements were conducted in person which greatly contributed to the depth of conversation. Most engagements lasted around 90 minutes, with several lasting nearly

[13] See collection of Fishery Management Plan StoryMaps here.
[14] https://www.esri.com/en-us/home

three hours. This resulted in 43 hours of rich, qualitative data to be used to better understand the river restoration landscape in Scotland.

Three workshops (two in-person and one online) were hosted in November 2024 and were designed to raise further awareness of the Fund's development and build on the key findings from the summer engagements. The findings from these workshop sessions can be found in the Workshop Summary Report[15], another deliverable of this FIRNS project.

2.2 Establish high-integrity river restoration project pipeline

As mentioned in the previous section, any organisations that had projects which were deemed 'investment ready' or 'ready to go'[16] were sent a follow-up survey form to provide additional information about the project(s) and add them to the portfolio. **The collection of 'ready to go' projects formed the portfolio, which represents a subset of the project pipeline comprising actions that aren't quite at the point of delivery**.

Between July 2024 and January 2025, 40 projects were submitted to the portfolio by 17 organisations. One project subsequently received funding from a different source so was removed, bringing the total to 39. Due to time constraints, surveys were only submitted for projects deemed 'ready to go', but the projects that were almost ready could be roughly estimated[17] since FMS had colour coded Fishery Management Plan actions during engagement sessions. See Figure 4 below which shows the project pipeline and a summary of the kinds of projects that are in the portfolio. This should be viewed as a point-in-time view of the supply side as this work is very dynamic, changing from month to month. However, there is still a lot we can learn from exploring the projects in greater depth.

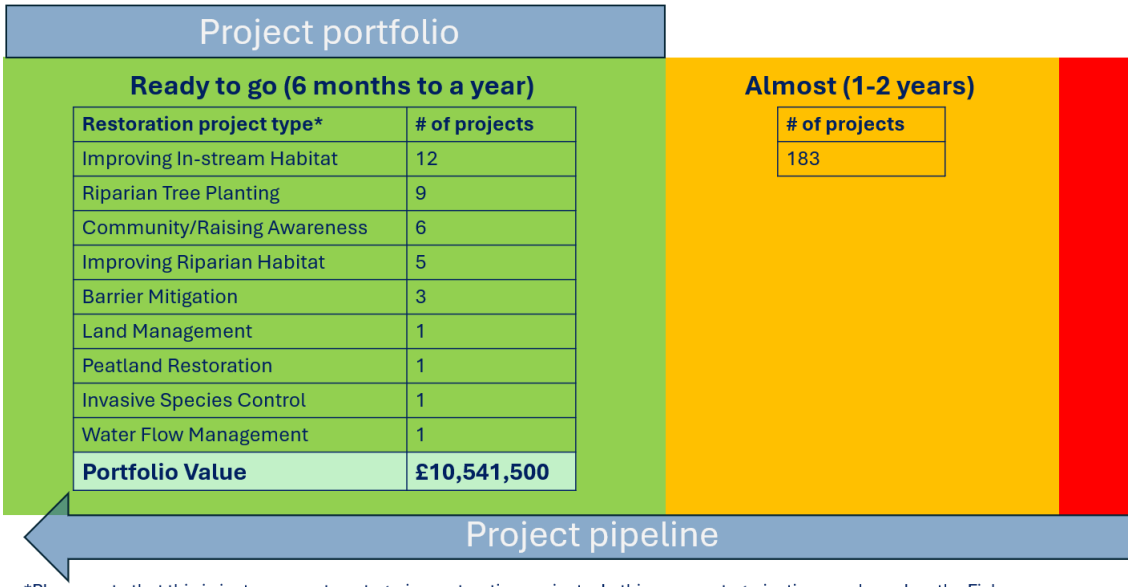


Figure 4 High-level summary of the project pipeline

[15] See Workshop Summary report here.
[16] 'Investment ready' and 'ready-to-go' should be read as synonymous throughout this report.
[17] This should be taken as a low estimate since actions in Fishery Management Plans actions were often catchment-wide and so could one day have several projects associated with each action.

Projects were categorised by type, using the same action types as were used in the Fishery Management Plans. This is just one way to categorise projects and can be adapted in the future to better target or market to Fund contributors. Several organisations submitted projects which integrated multiple actions (e.g. riparian tree planting alongside in-stream habitat improvements), but the survey form asked for the key management action associated with the project.

The top-submitted project type was 'In-stream Improvements', which includes actions such as bank stabilisation, river remeanders, and gravel augmentation. Riparian tree planting projects follow closely behind which aligns with the well-established need for more riparian tree planting in Scotland[18] and the grants currently available to make this work happen[19]. There were also six community and education projects submitted, highlighting the desire to do more of this work and the importance of practical on-the-ground restoration going hand in hand with community engagement. Education initiatives to date are largely delivered ad hoc as funding is made available or delivered completely in-kind, likely limiting their overall reach and impact. For the Fund's approach to community engagement, see the Community Engagement Strategy[20] document, another output from this FIRNS project.

Figure 5 below includes some of the aggregated high-level figures supported by the projects. FMS has tried to capture not only nature-based metrics but also social metrics such as jobs supported.

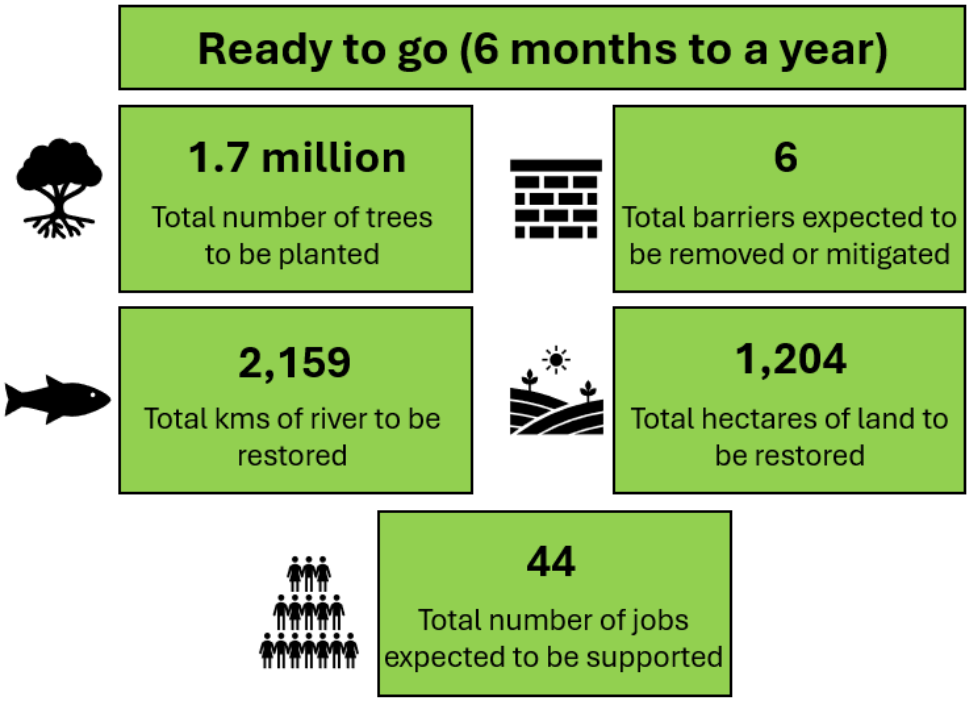
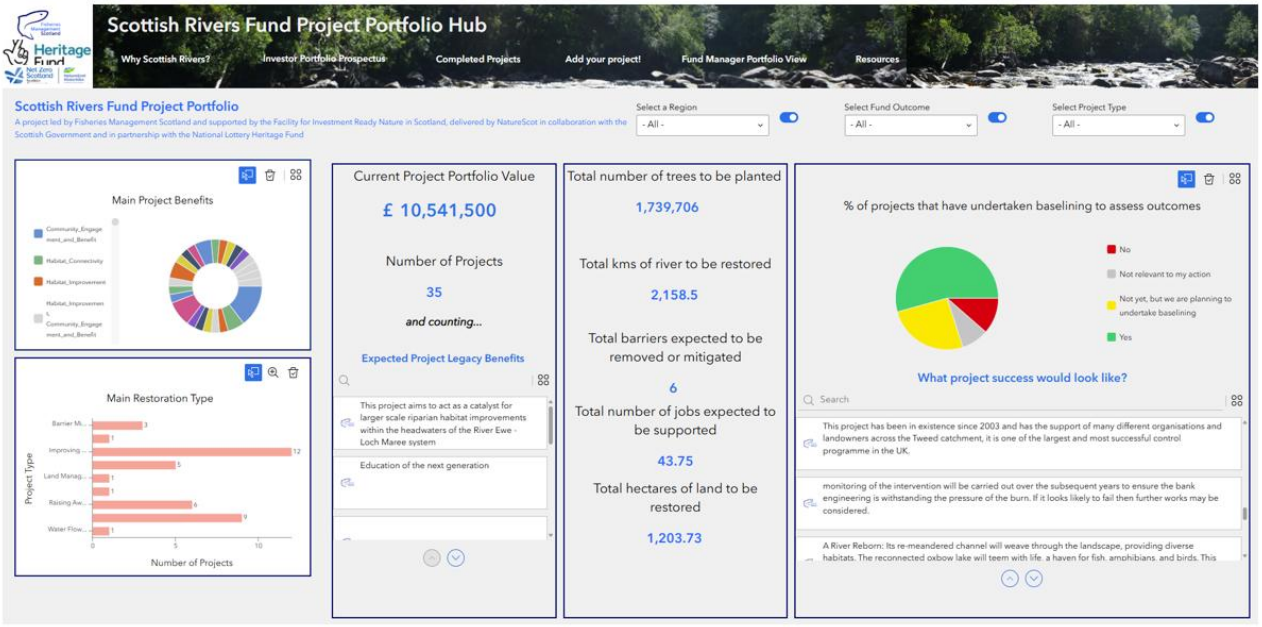


Figure 5 Aggregated, high-level statistics of the projects submitted to the portfolio

[18] Where to plant trees to protect rivers under climate change (Scottish Government)
[19] Grants such as the Forestry Grant Scheme, NRF, the Riverwoods Initiative, and private contributions have established riparian tree planting as a popular restoration action.
[20] The report will be linked once it is up on the FMS website.

The survey data was dynamically fed through Esri's Experience Builder tool, which was used to visualise the project portfolio. Experience Builder contains functionality to enable project developers to submit projects to the Fund in the future through filling in an embedded survey form. The functionality also allows different portfolio "views" for different audiences, such as the Fund manager and investors. Figure 6 shows an example of an 'Investor View'. While a Fund Manager's view would include a map showing project portfolio locations. This is hidden from the investor view since they have not been awarded funding yet and there were concerns voiced by some project developers about showing contributors the exact locations and landownership details of the projects before funding was confirmed. Further, the concept of the Fund is to maintain some separation from contributors and the projects that receive funding[21]. Once the Fund begins administering money, more detailed individual project information would be made available on the Investor View. Landowner permission will be required at the application stage when the Fund is up and running.



Investor View

Figure 6 Investor View on the Experience Builder platform. Please note that this platform is still a work in progress.

Work is still needed to progress and develop the portfolio to meet the needs of the Fund's future manager, contributors, and project developers. However, with this first iteration, we were able to show 'proof of concept' and showcase the usefulness of a dynamic platform to streamline and centralise the project supply. Further, the Riverwoods Blueprint Project[22] which is currently underway and which Fisheries Management Scotland is a partner in, is a complementary piece of work that seeks to build on this platform in the form of a Digital Centre of Excellence.

[21] The principle of the Fund being that contributors do not "claim" individual projects but are contributing to all projects delivered through the Fund

[22] See more details on the Riverwoods Blueprint project here.

Only those organisations which had projects that were deemed 'ready to go' were asked to submit surveys to the portfolio at this stage. There were several reasons why project developers had 'ready-to-go' projects. It was often just good timing. Some had recently completed a Nature Restoration Fund Development grant and were looking for delivery funding. Others said that they would utilise this Fund to obtain match funding for projects, where, for example, they couldn't acquire enough funding from the Forestry Grant Scheme. A few projects in the portfolio had recently lost out on funding elsewhere due to competition and were looking for another source. The diversity of the projects in the portfolio highlights that project developers are navigating a complicated funding environment which requires them to acquire funding from several sources in order to deliver successful restoration work.

> "*You don't necessarily need to fund all of it. If we had access to half of it, we can look for match funding. That would be a huge help.*"

Just over a third of projects submitted included at least some project development costs associated. This suggests that while projects were scoped and nearly ready, there were still some necessary actions (e.g. habitat surveys) needed before they would be ready to confidently begin delivery work[23]. This due diligence at the start was seen as key to delivering high-quality restoration projects and where funding is often hard to come by.

Organisational size and capacity influenced the size and type of project that came forward. Hence, there is a wide variation in project scales and types that were submitted to the portfolio. Projects ranged from a small spawning gravel reintroduction project to a large riparian tree planting project with catchment-wide ambitions. Table 2 below shows the breakdown in project cost, with around half being smaller projects costing £30,000 or less.

Table 2: 'Ready' projects in portfolio broken down by cost

Project Cost	Number of projects
Small (£30,000 or less)	20
Medium (£31,000 - £100,000)	8
Large (£100,000+)	11

Another survey question asked about benefits that were expected to come from the 'ready-to-go' projects in the portfolio. This was a multi-select question so projects could provide more than one benefit. Every project apart from three claimed that there would be more than one benefit generated from their delivery. Table 3 on the following page includes an aggregated summary of the responses provided. The point here is to highlight that river restoration projects can and do bring a multitude of benefits for land, water, and people and that it will be important to communicate these and relate them to contributor interests.

[23] How the Fund would handle project development costs versus delivery costs is still to be determined.

Table 3: 'Ready' projects in portfolio broken down by project benefit[24].

Project Benefit(s)	Number of projects
Habitat Improvement	23
Habitat Connectivity	18
Bank Erosion and Stability	17
Water Quality	14
Community Engagement and Benefit	11
Natural Flood Management	9
Water Quantity	5
Soil Quality	4
Air Quality	2
Other[25]	4

75% of the 'ready-to-go' projects had either already established relevant baselines or were planning to undertake this work. Baselines will differ based on the type of restoration project but generally included electrofishing surveys to assess juvenile fish populations, invertebrate samples and habitat surveys. Others simply claimed that they would monitor for tree survival. The chart below (Figure 7) is included in the Investor View as it will be important to establish confidence and trust that these projects are meeting their objectives and goals.

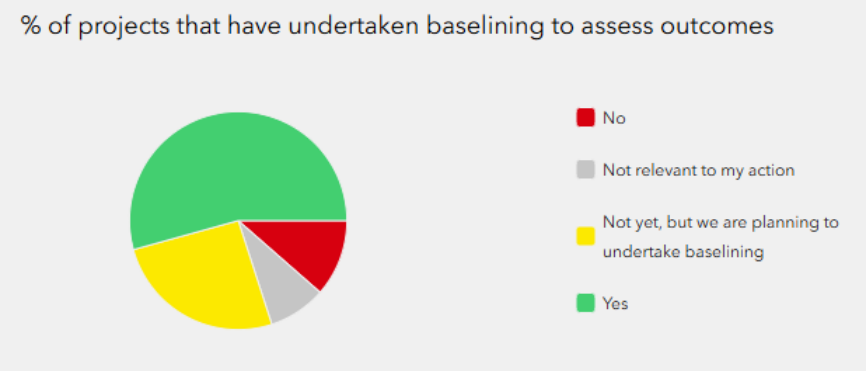


Figure 7 Pie chart showing breakdown in status of baselines in project portfolio

The survey also asked questions about the project's purpose, the legacy, and how the intervention was related to any others within their Fishery Management Plans or other ongoing work in their catchment. These questions were asked to help communicate to Fund contributors that high-quality projects can come in many shapes and sizes, address multiple pressures, and are often connected to wider catchment ambitions or engagement initiatives. See Figure 8 on the following page.

[24] The benefits in this table were partly inspired by those listed in the Riverwoods Project Register. The Monitoring Framework that was produced as part of this FIRNS project includes other ways to categorise and 'sell' project benefits and outcomes to Fund contributors.
[25] 'Other' mentions included aquatic ecosystem productivity, additional nutrition for rivers, and increased salmon populations.

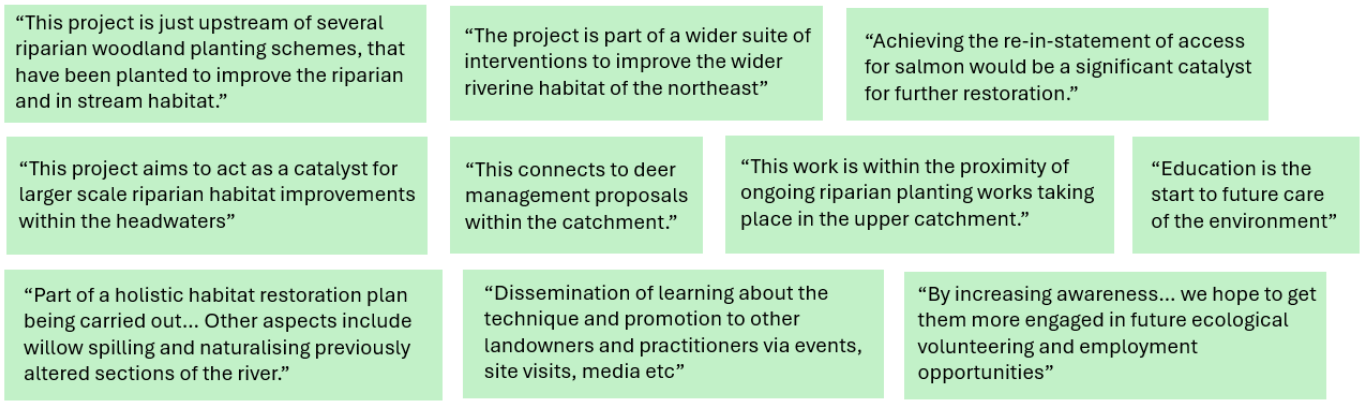


Figure 8 Survey responses to questions about project purpose and legacy

As marketing efforts for the Fund ramp up, it will be important to effectively communicate the benefits and importance of the project portfolio to ensure that the message is relevant to the needs and interests of those who will be contributing.

2.3 Gain a better understanding of the restoration process

Gaining a deeper understanding of the river catchment restoration process is important to inform what additional support project developers need to ensure a steady supply of restoration projects and to understand how the Fund can be structured to help this. Figure 9 below was produced to describe a summary of the restoration project process from an analysis of the engagement interviews. While many of these steps involve ecological knowledge and data, this figure highlights that restoration is largely a social process and is validated by other sources[26].

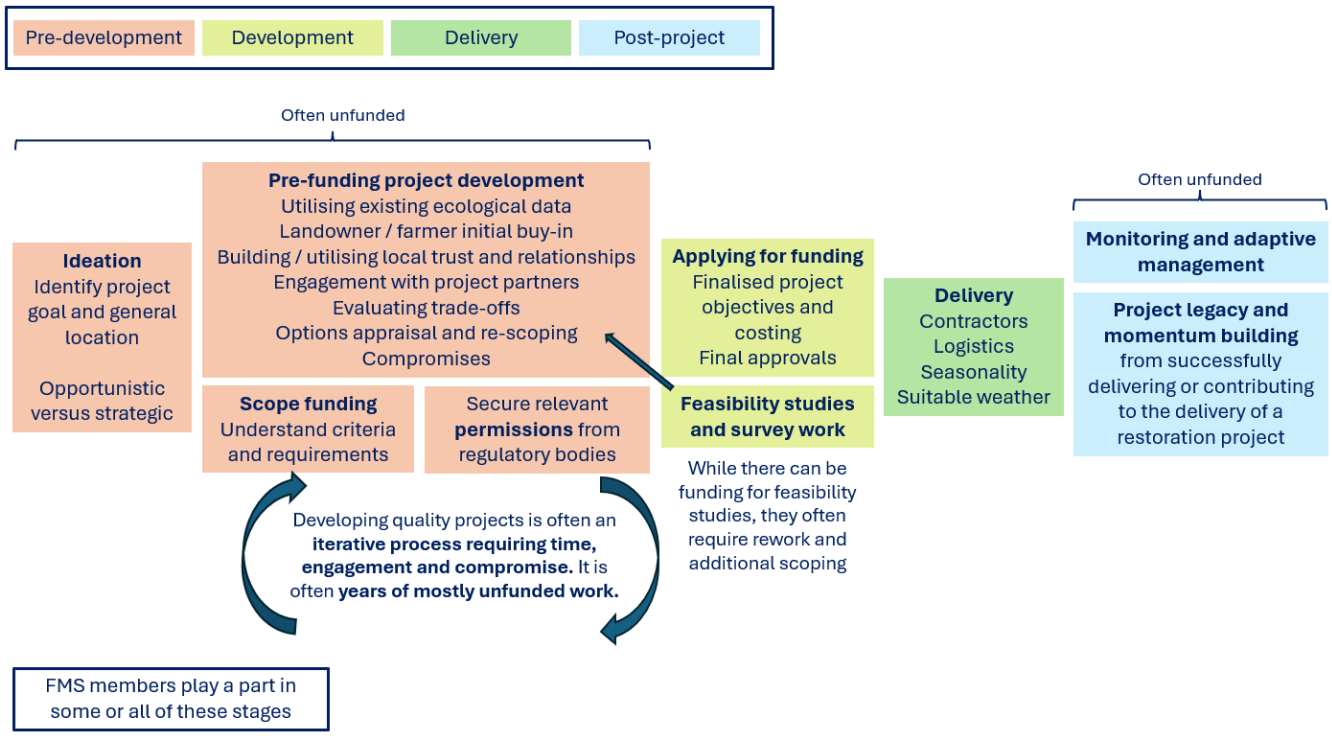


Figure 9 Summary of the restoration process

[26] The science and practice of river restoration (Wohl, Lane and Wilcox, 2015)

The restoration process was broadly separated into four stages. Different organisations played a part in some or all of these stages – with some leading all stages of the process while others were members of a partnership and did the project's river habitat monitoring work. Others quietly influenced from the background, preferring to help with the formation of project ideas and offering support with grant applications. While the stages in Figure 9 may not apply to all project types, many of the necessary steps to get a project to the 'investment ready' stage are largely unfunded and heavily time consuming.

The river restoration process isn't necessarily linear, often requiring months or years of rescoping and rework even after a funded project development grant. Ultimately, restoration can be an incredibly complex and messy business requiring compromises, existing relationships, and long-term vision. While many interviewees highlighted the fact that their local organisation has built up years of trust in the area which has helped to progress restoration, there was often an emphasis that the unfunded time associated with these projects was extensive.

> "*The time it would take to get projects off the ground is lengthy... the lead-in time for some of these things, just in terms of conversations and scope and works, and rescoping works,* ***it adds up***."

> "*We're all doing in-kind work. Because it does* ***take a lot longer than you expect****... there's not a readily available farm you can just go... this is* ***knowing the area*** *and knowing where you can go in. And using the right species and using a variety of species as well.*"

2.3.1 Critical concerns with project supply side

Project developers were clearly passionate about restoration while describing the socio-ecological benefits these projects can bring. As they described the restoration process during engagements, challenges associated with getting these projects to the 'investment ready' stage surfaced, where significant challenges were faced throughout the river restoration process. Often, teams faced more than one challenge, leading to a compounded impact. See Table 4 for the most mentioned challenges associated with river catchment restoration. The cumulative impact of each barrier experienced pushed the chance of 'readiness' further and further back and created an understandable frustrating and demotivating situation for project teams. These challenges represent significant bottlenecks in developing a river restoration project supply.

Table 4: Key challenges in restoration highlighted during engagements

Challenge	Description	Example Quote
Organisational capacity	This is a systemic concern expressed in the majority of engagements. Lack of time to scope, apply for funding, and sometimes lack of skillset to develop projects. This was felt strongest by smaller organisations.	"*And we've both determined it would be a great thing, and we'd love to do it. Neither of us ever get the time to do it. Because we're so busy trying to deliver all the things we have to deliver just to keep the wheels turning. So, it's a resourcing issue as much as anything. That's our big problem because we don't, we never stop, we're flat out*."
Effective partnership with SEPA	This challenge was mostly shared in the context of the wide range of human pressures facing river catchments which have the potential to undermine the benefits of restoration work.	*"We have a big issue with sediment... diffuse pollution in this catchment is primarily sediment. There is some concern about pesticides and things, and we have got some evidence of that, but I think it's particularly the sediment."*
Agricultural land use dynamics	Concern from farmers about trade-off with basic payments; likelihood of restoration in an area is impacted by value of surrounding agricultural land; wider cultural difference with farmers' view of rivers	"*They sometimes see the benefit, but ultimately if they're taking it out of production, how are they compensated? It's as simple as that*." "*There are funds for alternative farming practices... No, I think it's something that everybody complains is not available*."
The process of obtaining funding	Fund criteria inflexibility and steep competition with current funding mechanisms. Funding availability could also be influenced by whether there was industry presence in a catchment or if some of the catchment was contained in National Park boundaries	*"We keep a close tab on what's available and if something comes up, then we always try and get an application in. But it's quite a time consuming process, you know, it's such a small organisation to go through it all, and sometimes it pays off, other times it doesn't."*
Landowner willingness	Alternative land use interests; They do not always see the benefit; They often want the project to be at least cost neutral; "Chicken and egg" dilemma with scoping funding and getting landowner approval.	"*First of all, that is the number of stakeholders involved, number of landowners, many of whom will have different and at times conflicting land management and sporting objectives*."
Deer management	Without suitable management, native regeneration and growth will be undermined	*"We can't guarantee that the deer numbers are going to be low enough that the trees would survive outside the enclosures"*

As a quick note on accessibility and equity, these challenges seemed to be exacerbated for smaller organisations. While larger organisations struggled with capacity and finding suitable funding, they were more likely to have previously delivered restoration projects, having been successful in the past with grant awards allowing them to bring on staff with diverse skillsets and expand their catchment knowledge. Smaller organisations did develop high-quality restoration projects and demonstrated extensive local knowledge, but they may require additional support with accessing funding and

developing capacity to speak with landowners and other stakeholders. Some smaller organisations asked how the Fund would ensure that a variety of organisational sizes were supported, not just those who could deliver at scale. This will be an important consideration as the Fund continues to develop in order that it is as accessible as possible.

2.3.2 Key solutions identified

Solutions to these critical challenges were explored further during the November workshops. During one of the activities, workshop participants were shown the challenges from Table 4 and were asked to brainstorm solutions. See Table 5 below for some of the solutions identified for each challenge. Many solutions touched on the need for regulation and greater partnership working to support restoration initiatives.

Table 5: Solutions to challenges identified during the workshops

Challenge	Description	Solutions Identified
Organisational capacity	This is a systemic concern expressed in the majority of engagements. Lack of time to scope, apply for funding, and sometimes lack of skillset to develop projects. This was felt strongest by smaller organisations.	• More development funding availability • Support for FMS members to acquire more funding • Skills building and training
The process of obtaining funding	Fund criteria inflexibility and steep competition with current funding mechanisms. Funding availability could also be influenced by whether there was industry presence in a catchment or if some of the catchment was contained in National Park boundaries	• Open engagement, accountability and soft political pressure • Build more formal working relationships • RBMP4[27] as an upcoming opportunity
Agricultural land use dynamics	Concern from farmers about trade-off with basic payments; impacted by value of surrounding agricultural land; wider cultural difference with how farmers view rivers	• Finding common ground with farmers to build trust • Subsidy payment incentives through new Ag Bill • Regulation and pressure
Suitable available funding	Fund criteria inflexibility and steep competition with current funding mechanisms. Funding availability could also be influenced by whether there was industry presence in a catchment or if any rivers flowed through National Parks	• Funds to allow bundling of full cost of projects; integrated outcomes • Funds to adopt more adaptable mindsets
Landowner willingness	Alternative land use interests; Not seeing the benefit; Wanting the project to be at least cost neutral. “Chicken and egg” dilemma with scoping funding and getting landowner approval.	• Education, public hall and onsite events to communicate benefits • Use existing Trust/Board relationships with landowners
Deer management	Without suitable management, native regeneration and growth will be undermined	• Incentives to reduce deer numbers in an evidence-based way • Share best practice examples to get stakeholder buy-in

[27] RBMP = River Basin Management Planning. This planning is the responsibility of SEPA to ensure that Scotland’s freshwater environments are in good condition, laying out actions to address pressures. The current RBMP is due to be completed by 2027.

In addition to the workshop sessions, solutions to expanding Scotland's supply of river catchment restoration work were also discussed during engagement sessions. There were some complementary findings between solutions noted during workshops and engagements, which was great to see and reenforces the need to purse them. Given that engagement sessions offered more time for elaboration on these solutions, supplementary findings and further nuance on what is needed to expand river restoration work are detailed below.

Greater Project Development Funding

The river catchment restoration process diagram (Figure 9) at the beginning of this section shows the volume of often unfunded work that goes into developing projects. There is a need to acknowledge this vast amount of work and fund as much of it as possible – either through the River Catchment Restoration Fund itself or in coordination and partnership with public bodies. The key here is to have greater support and investment in projects during their earliest stages to ensure a sustainable pipeline of river restoration work. Funding development work doesn't just mean feasibility studies. It also means funding jobs and staff time to undertake necessary engagements and conduct baselines and monitoring work to better understand the pressures faced in their catchments to ultimately deliver high-quality restoration work across Scotland.

> "*There is a shortfall in development funding... devoting time and effort to doing all this stuff when they've got the day job to do as well. All of that development is on top initially, but if they could get some income to fund a development phase, that would be a huge help*."

Flexible Funding and Implications for the River Catchment Restoration Fund

Along with having access to early-stage development funding, the type of funding secured matters – and specifically how flexible it is. Lots of the funding mechanisms that project developers currently apply to were described as inflexible, both in dispersal of funds, changes to conditions, and criteria for the activities it would fund. Specific comments related to this were: full-cost recovery, flexibility in spend deadline, flexibility in how money is spent, no threat of "clawbacks" if unforeseen circumstances arise, and the ability for upfront payments for smaller organisations to be able to manage cash flow. This is also outlined in the Nature Finance Certification Alliance Toolkit[28], which lays out the ways in which funders can better support project teams.

> "*So, it's about finding that common interest. Having that flexibility with any funding is absolutely key*."

The need for an application process that balances rigour and respect for project developer's time is crucial. During the workshop sessions, someone suggested that there should be an option for a call with Fund staff to elaborate on application responses rather than being required to write pages and pages of justification. While due diligence is important to achieving high-integrity, at the moment lengthy application

[28] NFCA Toolkit – Recommendations for funders

processes simply cause frustration and crowd out smaller organisations who may be tighter on capacity.

Another suggestion was around prioritising local contractors and Community Wealth Building principles, which is an approach to rural development that focuses on wealth retention within local communities[29]. In other words, many stakeholders felt that they would prefer to use local contractors which might not fit the 'value for money' criteria in many existing fund procurement requirements. The need for flexible funding came from the notion that restoration is a complex and uncertain undertaking, making it necessary to have flexibility to still be able to deliver outcomes should circumstances change. Finally, supporting innovative approaches to restoration was identified as an important element of a future fund[30].

> "*Now, if this fund was able to support innovation, you know, and trialling things that have never been trialled before* ***without recourse to the organisation****, that is something that I think would further nature restoration in Scotland anyway.*"

Capacity Building

Another solution mentioned by most project developers was around addressing the need for greater capacity in the sector to scope and deliver restoration work. Several teams shared that they were looking to hire a Project Officer or similar role to scope and support the development of restoration projects.

This included building up the team's skill diversity to deliver restoration projects, especially since restoration projects typically benefit from having people with a diversity of skillsets working on them. Some suggested that having a shared resources across FMS membership could be useful if coordinated by FMS. This was connected to the challenge of having stable finances within the charitable sector, which often has to rely on short-term contracts and grants for project officer and internship roles, making it hard to build staff resource for the longer term.

> "*And then that way, they potentially then would be employed the whole year. Then you wouldn't have like five part-time people. You'd have maybe two full-time people.*"

In addition to hiring additional staff, there was also a desire from some project developers for support with applying for funding, knowing when grants become available, rough costing guidance, and restoration technique best practice sharing. Further, some interviewees expressed an interest in upskilling current employees while others were comfortable with their current skillset as they were as long as they had the funds to hire in contractors as needed.

> "*We're definitely not geomorphs. We're learning as we go. On my wish list would definitely be a geomorphic assessment and basic hydrology training.*"

[29] Community Wealth Building (Scottish Government)
[30] See pages 28 and 29 in the 2025 FMS Annual Review for examples of such innovation.

Finally, partnerships were discussed as being crucial to undertaking successful restoration work in the past and for building capacity to work at a wider scale. The organisations who hadn't done much restoration work to date described organisations in their catchments that they were keen to discuss partnership opportunities with. After all, relationships and specifically local relationships are vital to restoration work. Local organisations rooted within their catchments and being enabled to deliver projects is a key proposition of the Fund and will drive more locally led restoration action.

Culture and attitude shift towards restoration

Despite the pushback sometimes experienced by project teams, during several of the engagements, there was discussion about how the perception of restoration seemed to have changed even in the last handful of years – among landowners, farmers and community members. For example, some landowners who had previously been opposed to restoration, were now open to the idea. This could be for several reasons, either through seeing a successful project on another adjacent landholding, speaking to a fellow landowner who has had a positive experience, engaging with media such as a river restoration documentary film, a change in ownership from the landowner to their children, etc. This underscores the importance of continuing to engage people with the benefits of doing this kind of work.

> "*And whereas the older generation have been much more engaged with the farming and the farming productivity, the younger generation are seeing the climate and biodiversity and looking at managing the estate differently. And you know, I think if I'd gone 10 years ago to the estate and said, let's remeander this three-year field, they just said, oh no, no, that's a bit for the cattle in the winter. And this is a new generation*."

> "*So, I mean, even just raising our profile and having that would include engagement opportunities, I think, a wee bit more. Because people are interested. There's a lot, like, out here where people want to take kind of ownership, like some kind of responsibility for the rivers and things like that. And I don't think we're kind of hitting that at the moment in terms of engaging with that*."

"Source to sea" restoration: The case for river catchments

Some interviewees were increasingly looking to deliver projects at a catchment scale, through a coordinated programme of restoration work, expressing the need to think beyond the river itself and address the key pressures that often originate on land. This involves partnership working to better understand the land-use dynamics and differing incentives that matter to catchment stakeholders. Having a dedicated initiative was described as helping to build momentum and more strategically coordinate restoration work.

> "*Collaboration, so that it's not just in one area having a minimal impact. A bit more of a landscape scale effect, but not only looking at restoring morphological fluvial processes in the river but trying to get the local farmers to adopt more nature-positive farming practices*."

The Fishery Managements Plans proved very useful in identifying relevant actions for the project portfolio, often going far beyond the fisheries themselves to address catchment-scale pressures. This also included monitoring things that went beyond solely salmon and sea trout populations to include invertebrates and general habitat health.

Creating a Holistic Policy Environment

While regulation solutions were mentioned during the workshops, they were further elaborated on during engagements. Navigating the everchanging landscape of policy incentives and grant payments, which often have conflicting objectives is presently making things difficult. This included the urgency for agricultural subsidies and schemes as part of the Scottish Government's upcoming Agriculture and Rural Communities Bill to work in harmony with and incentivise vital river restoration work. A few interviewees based in rural Scotland noted that policies on housing provision were linked to the ability to progress restoration action since it made hiring staff to support this work that much more difficult.

Conclusion

Ultimately, making headway on these solutions will help to drive river catchment restoration work in Scotland. The good news is that many restoration project developers were already utilising some of these solutions. Each project delivered has the power to build momentum if it is seen as a success and if people understand and can see the benefits for themselves. It also helps to build confidence in the sector and attract additional investment.

> "*So, start with the projects first. Once you start, once you prove that you can actually make things happen on the ground, people will sit up and notice you. And when you go to them and say, well, we'd like to do this one next, then they say, oh, well, we might be interested in that.*"

3. The case for attracting corporate interest

In order to attract investment, there is a need to clearly articulate the benefits of investing into the Fund. Through the process of developing the portfolio and conducting engagements, it is evident that through solution-oriented restoration action, the Fund is an attractive proposition. It is anticipated that the Fund would 'sell' **ecological and social outcomes** that align with government climate and nature ambitions and empower local organisations to deliver projects that address pressures in their local river catchments. The beneficiaries of such work would include river catchments and the life they support, local project teams who would deliver this work in partnership and local communities who would benefit through job provision and relevant engagement opportunities. Contributors would benefit from boosting their brand image and investing in Scotland's iconic river systems, wildlife, and people.

The key selling points for the River Catchment Restoration Fund are:

- The projects supported by the Fund are locally led with coverage across Scotland
- It would simplify the need for a contributor to administer funds themselves, creating an efficiency
- It has a Community Engagement Strategy to support project teams with integrating engagement into their restoration work in a proportionate manner
- It has a Monitoring Framework produced through collaboration which will support outcome-based reporting and effective baselining guidance to support high-quality projects

Figure 10 below shows the outcomes to be supported by the Fund, identified through the Monitoring Framework. These outcomes were informed by current ESG standards, interests, and from suggestions shared by workshop participants.

Figure 10: River Catchment Restoration Fund outcomes

All projects supported by the Fund would fall under one or several of these outcomes based on the goal of that project. For example, a combined riparian tree planting and bank stabilisation project might be targeting 'Cold, Clean Water' through river shading but also deliver on the 'Biodiversity and Ecosystems' outcome through demonstrating a reduction of sediment entering watercourses and smothering spawning gravels. For additional examples, please see the Monitoring Framework. Given that each catchment in Scotland is different, there may be different baselines needed to fit the local context. The projects delivering each outcome could be aggregated into a portfolio to show the percentage of projects that are on track to achieve their identified goals and objectives.

Taking the learnings from the previous section, the development of the Fund offers an opportunity to address some of the challenges identified in section 2, particularly

challenges associated with funding and capacity building. Money, and the criteria attached to it, can be a key enabler or hinderance on the trajectory of restoration work. During workshop sessions, participants were asked to note characteristics of an accessible and high-quality Fund. A summary table (Table 6) is shown below. What is key here is the importance of establishing baselines and the need for funding flexibility.

Table 6: Summary table of results from a workshop activity asking participants what characteristics an accessible and high-quality Fund would have

Characteristics of an accessible and high-quality River Catchment Restoration Fund		
Must have	Nice to have	Shouldn't have
• Baselines & assessment of outcomes/benefits • Holistic and flexible funding (full cost recovery, multi-year funding, upfront payments, development cost) • Flexible budget spending • Clear benefits for rivers & wider ecosystems • Streamlined & flexible application process	• Capacity within the fund to support project teams (dedicated fund manager, application guidance, stakeholder engagement assistance) • Community benefits (i.e. education, employment) • Maintenance and monitoring costs	• Lengthy application form • Onerous or rigid reporting requirements • Unachievable outcomes • Support poor quality projects with possible negative impact • Greenwashing

What kinds of projects should the Fund support?

The Fund should support actions that show how they will achieve the above outcomes in relation to rivers or how their project will be a catalyst for more restoration work in the future. Considerations include:

- Projects that address **specific pressures on river functions and boost biodiversity**, such as:
  - Barrier mitigation or removal
  - In-stream work to increase habitat and channel complexity
  - Wetland creation to store more water during high flow events to slow the flow and increase riparian biodiversity
  - Riparian woodland creation to increase habitat diversity, stabilise banks and provide shade over rivers
- Projects that **integrate multiple actions** into one project such as willow spiling, wetland creation, education days, and on-site events.
- Projects that **address systemic pressures** within the catchment and enable greater future action such as collaborative deer management and community engagement programmes
- Projects from a **diversity of organisational sizes**, with the understanding that smaller organisations might need more capacity support with the application and reporting processes
- Projects that show they are **working in partnership**, ideally with the local Rivers or Fisheries Trust or DSFB if these organisations are not the project leader, or at least show wider support than one organisation
- Projects which can show they are taking an **evidence-based, innovative approach** to river restoration

What kinds of projects might the Fund deprioritise supporting?

Of course, the Fund must have a focus. The current understanding is that the Fund should deprioritise large-scale woodland and peatland restoration that could be funded through existing funding available through Peatland ACTION and Forestry Grant Scheme. Further details on what is ‘in’ or ‘out’ with be further explored during the next phase of the project. Further work is required to solidify questions of governance and establish a decisions panel and ethics board. The work to progress these elements will be largely influenced by the host body for the Fund.

4. Moving towards market readiness

The undertaking to establish and communicate the supply side of river catchment restoration work in Scotland revealed that there is a lot of potential to support local action that yields multiple benefits. There is a strong track record of project delivery in the Scottish river restoration space[31] supported largely by public funding. There is a clear opportunity to further expand funding support for river restoration by engaging corporates with a view to deliver more and distribute funds more widely. This will take private and public partnership support[32] and addressing the identified bottlenecks will be key to enabling greater restoration work in Scotland.

There remains a great deal of work to be done to engage with corporates and market the Fund to contributors on the demand side and ensure that outcomes match contributors' needs. The experience of SMEEF will be extremely valuable to inform this next step. The following are recommendations that are based on the insights from the previous sections of this report, applying to both the Fund's development and to the wider system of river catchment restoration supply in Scotland.

4.1 Market test Fund outcomes in partnership with contributors

The following activities have been identified as crucial future steps in marketing the Fund:

- Hosting a contributors' forum to learn more about which corporates are interested in the concept and what they would need from their contribution
- Establishing a marketing strategy to systematically approach pitching

FMS has prepared some early marketing material (Figure 11) as QR coded promotional "postcards" [33] tested at the international Wild Salmon Connections[34] and edie-25[35] events. This has already attracted a list of interested parties to learn more.

Figure 11: River Catchment Restoration Fund ("Scottish Rivers Fund") promotional postcards

[31] Projects such as those supported by the Scottish Government's Nature Restoration Fund.
[32] See Zu Ermgassen and Löfqvist (2024) 'Financing ecosystem restoration'
[33] This marketing material was developed with support of the Golden Bottle Trust.
Scottish Rivers Fund = River Catchment Restoration Fund
[34] https://www.missingsalmonalliance.org/wild-salmon-connections
[35] https://www.edie.net/event/edie-25/

4.2 Continue to develop Fund's governance structure and approvals process

Key next steps for the Fund include:

- Balance project developer needs with Fund contributor needs that will emerge during the next stage of Fund development.
- Ensure that Fund host can deliver on as many of the project developer needs as possible. This includes procuring development funding to support project pipeline, allowing full-cost recovery, funding monitoring work, explore and pilot application and reporting processes that is not overly onerous on project developers.
- Establish Fund governance that includes promoting partnership building and knowledge sharing between project developers.
- Ensure the Fund is as accessible as possible, having appropriate staffing to support a range of project types and sizes.
- Establish an ethics process with Fund host, prioritising contributions from organisations whose values align with Fund objectives and can show they are following the mitigation hierarchy.
- Ensure that contingency for adaptive management is procured to support project teams in the event that unforeseen events occur that require rework and adaptation. Clearly communicate where risk will lie. Promote a culture of learning and encouraging innovative techniques.

4.3 Build a sustainable restoration project pipeline

The challenges that restoration project developers face should be acknowledged and addressed as far as possible through the new River Catchment Restoration Fund. These projects directly help to deliver on the Scottish Government's climate and nature policy objectives and the organisations and partnerships that deliver them need the right support. For example, FMS can play a role in addressing the capacity challenges faced by member organisations, including application assistance, accessing a diversity of money sources, and crafting more strategic plans.

As it nears market readiness, the Fund should also seek to improve the process for identifying projects for the portfolio. To do so, it should consider the following:

- Revisit the categorisation of restoration projects since they do not always fit neatly into boxes (e.g. a project that spans several restoration actions). FMS will work in partnership with contributors to understand categorisation needs and The Rivers Trust, who have a common interest in this.
- Work in partnership the Riverwoods Blueprint Project to support further development of the Digital Centre for Excellence to build out the project pipeline, establish riparian woodland restoration best practices, and connect project teams with development grants.

A number of relevant policy areas and strategies were identified that are relevant to this FIRNS project, the Fund, and for sustaining a restoration project pipeline.

- River Basin Management Planning 4
- The Agriculture and Rural Communities (Scotland) Bill
- Scotland's Biodiversity Strategy, including deer management policies
- National Planning Framework 4 to address rural housing
- Scotland's Wild Salmon Strategy
- Natural Environment (Scotland) Bill
- Existing public funding mechanisms such as the Nature Restoration Fund, Peatland ACTION, the Water Environment Fund, and the Neighbourhood Ecosystems Fund. Private funding should not be seen as a substitute but rather a support to existing public support.

Scotland's rivers can once again thrive if greater investment is directed towards those on the ground who know the catchment and what action is needed. Ensuring that the River Catchment Restoration Fund is fit for purpose by balancing the needs of both the project developers and contributors will lead to lasting restoration impacts on waterways, landscapes, and communities for years to come.

Appendix

Table 7: Organisations included in engagements

Organisation Name
Argyll Fisheries Trust
Ayrshire Rivers Trust
Beauly District Salmon Fishery Board
Caithness District Salmon Fishery Board
Clyde River Foundation
Cromarty District Salmon Fishery Board
Dee District Salmon Fishery Board
Dee Rivers Trust
Deveron District Salmon Fishery Board
Deveron, Bogie and Isla Rivers Charitable Trust
Don District Salmon Fishery Board
Esk District Salmon Fishery Board
Findhorn, Nairn and Lossie Rivers Trust
Flow Country Rivers Trust
Forth Rivers Trust
Galloway Fisheries Trust
Helmsdale District Salmon Fishery Board
Kyle of Sutherland Rivers Trust
Lochaber Fisheries Trust
Ness District Salmon Fishery Board
Nith District Salmon Fishery Board
Northern District Salmon Fishery Board
Outer Hebrides Fisheries Trust
Skye and Lochalsh Rivers Trust
Spey Catchment Initiative
Spey District Salmon Fishery Board
Tay District Salmon Fishery Board
Tweed Forum
Tweed Foundation
Ugie District Salmon Fishery Board
West Sutherland Fisheries Trust
Wester Ross Fisheries Trust