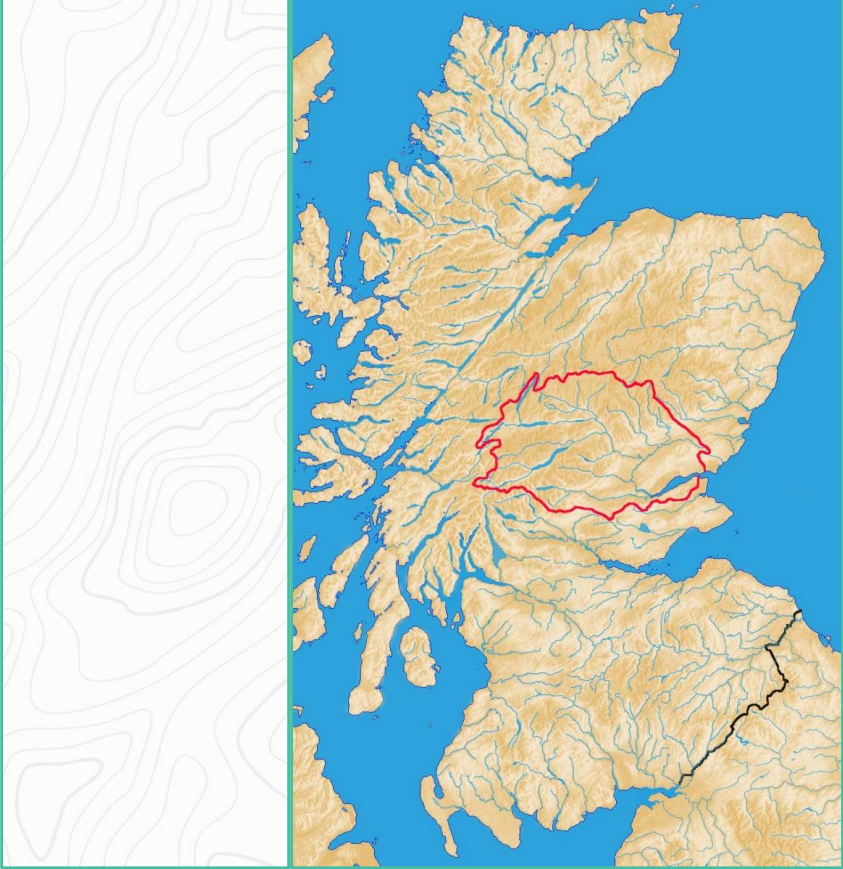


# Bioregional Finance & Governance Stocktake and Gap Analysis

Tay Bioregion, Scotland, September 2024 - January 2025



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## Introduction

This report is the result of 10 in-depth conversations between Clare Cooper, Marian Bruce, two of the Directors of Bioregioning Tayside and Leon Seefeld of Dark Matter Labs, exploring 15 key elements related to bioregional organising. The primary aim of these discussions was to assess the significant progress already made in bioregioning efforts across the Tay Bioregion in Scotland and to identify foundational gaps that may need to be addressed in preparation for establishing new Bioregional Financing Facilities (BFFs) in a subsequent phase of collaboration between Bioregioning Tayside and Dark Matter Labs.

The stocktake and gap analysis were informed by examining what other bioregional teams around the world are doing across the 15 elements, identifying emerging “good practices” and learning from diverse contexts.

This document outlines the questions considered during the conversations (as well as additional questions deemed less urgent or outside the scope of the discussions at the time) and includes key notes derived from the dialogues. Key observations, overarching reflections, and potential next steps are annotated in the comments on the right-hand side. These annotations will support the team's upcoming prioritisation exercise, helping to determine which gaps must be addressed before meaningful discussions on Bioregional Financing Facilities can take place.

The broader purpose of this report is to offer a tool for other bioregional teams to evaluate the maturity of their initiatives, enabling them to identify gaps that may need attention or are recommended to address before developing BFFs, as these facilities rely on a robust organisational foundation to prevent capture or misuse by existing forces in the financial sector.

While we hope the structure of this stocktake process proves valuable to other teams beyond the Tay Bioregion, we intentionally avoid prescribing a rigid methodology for identifying and prioritising gaps. The context-specific nature of bioregional work necessitates flexible, case-by-case evaluations of what is required, when, and in what quality. Instead, this document aims to highlight the breadth of potential questions and inspire other teams to adapt and conduct their own process. We obviously welcome anyone who wants to learn more about the process that we ran or is curious to learn more about the content of the discussions.

Here's a guide for how to use this document best for different purposes:

- If you are looking for inspiration for your own stocktake, have a look at the [Table of Contents](#) first, to get an overview, and then at [the questions in green/blue](#) for every one of the 15 elements to understand in more depth what you might want to ask yourself.
- If you want to learn more about Tayside's current learning and maturity edge, have a look at [the comments in purple](#) on the right-hand side.
- If you want to learn more about the current position of bioregional organising in Tayside, have a look at the [Summary](#) section and feel free to read [the responses to all questions in the 15 sections in black](#).

## Summary

- 1. Bioregional Organising Team**

*The core team is still small and rooted in shared friendship, passion and care for the natural world joint working over many years. Whilst legally necessary governance structures are in place, broader organising structures and governance approaches evolve in a project and needs-based way. Adaptive Governance approaches are being trialled in one live project. Technical expertise is usually outsourced when finance permit, for example, one of Scotland's leading Food Journalists acts as BT's Food Ambassador. Funding and capacity are significant constraints, with much of the work being undertaken by the directors gratis.*
- 2. Operating Model & Theory of Change**

*Bioregioning Tayside (BT) is an incorporated Community Interest Company (CIC) with asset lock and is well connected in the region. Its operations have been fairly fluid, driven in part by project funding availability and the capacity of the directors to lead activities forward. It has operated both as an enabler and a deliverer of specific funded projects, cooperating with many other project-relevant local and regional organisations. A ToC and Bioregion-wide strategic goals are in development. Learning happens organically and when specific issues need collective discussion and resolution.*
- 3. Bioregional Stakeholder & Relationship Mapping**

*Stakeholders have been mapped for different purposes, there is not one all-encompassing map. The qualitative side of maps (dependencies, motivations, pains & gains, conflict, etc.) is currently held more as tacit knowledge than captured information. The team has a clear understanding of different groups and interests and their relationship with the kinds of bioregional work currently prioritised.*
- 4. Multi-Stakeholder Engagement Process**

*The engagement process has been very project-driven so far, involving hundreds of people. Usually, people are not explicitly approached about "bioregioning" but through project themes. The relevance of the projects and the quality of the work is paramount for stakeholders to trust BT.*
- 5. Bioregional Assets & Liabilities**

*A formal mapping of bioregional assets has not yet been done by BT but they are implicitly known by the team. Other organisations, such as Local Authorities and Adaptation Scotland have done maps on risks and liabilities, such as flood risk. Control over assets and liabilities has not been mapped either. There is an interest in aligning with other bioregional teams elsewhere with regards to methodology.*
- 6. Project Portfolios & Synergies**

*The current 'live' project portfolio is small (4) driven by and significantly constrained by available, restricted funding. A long list of other project ideas exists in various stages of development and several stakeholders have indicated interest in helping to activate parts of the list. Bioregional business cases have not been detailed and financial capital requirements across the portfolio are still to be undertaken. Synergies between projects are also yet to be strategically and systematically explored or realised.*
- 7. Bioregional Visioning**

*There has not yet been a collective visioning process across the whole bioregion, although individual projects have undertaken aspects of this work relevant to the project. The team is wary of running too many workshops and processes focussed on "talk" though, as stakeholders want action. There is also a concern to manage expectations given the project funded nature of all the work thus far. There is possibility for capturing peoples' perspectives on a bioregional vision through modes that offer direct connection, such as a roadshows – the team have a plan to organise Bioregional Ceilidh's for example - or by organising the showing of films such as Scotland the Big Picture's "Riverwoods" and "Why Not Scotland", or by collaborating with others seeking Tayside-wide engagement such as the new Tayside Adaptation Partnership.*
- 8. Bioregional Regeneration Strategy Document**

*There is no Bioregional Regeneration Strategy Document yet. But the team acknowledges the importance and utility of such a document as part of BT's evolution, especially for the funding and financing community and the design of a BFF.*
- 9. Bioregional Hub Function**

*There is currently no physical Bioregional Hub in Tayside and the team does not believe it is the most effective way to fulfil 'Hub' functions such as place-based learning and Bioregional coordination. A lot of regional historic and cultural information is held by various established institutions, such as archives and museums – none of them have a bioregional lens yet. Relevant environmental and economic data is spread across many institutions, regional and national and is often very difficult to access. Presenting relevant information in an integrated way would help people naturally start to see the bioregion as a cohesive unit. Two projects, the River Erich Catchment Restoration Initiative and Feeding Tayside Through The Climate Crisis are attempting to model bringing together environmental and human data into coherent, publicly accessible StoryMaps. There are no dedicated Bioregional education centres yet, where people can acquire new bioregioning skills, although there are a number of education for sustainability initiatives which could benefit from greater co-ordination.*

<b>10. Bioregional Health Metrics and Indicator Frameworks</b>	<i>A bioregion-wide health measurement is missing at this point. Existing relevant metrics are generated by a wide variety of institutions and organisations and not well integrated. There is a goal to develop a Monitoring, Reporting and Verification system for the River Ericht Catchment Restoration Initiative, which could be transferable to other catchments in the Bioregion and, linked to this an ongoing effort to establish a Bioregion-wide Nature Finance Aggregation Platform, which would also require a metrics framework.</i>	
<b>11. Bioregioning Competencies, Qualities &amp; Attributes (CQA's)</b>	<i>The team has started to think about CQAs needed for the bioregioning work and begun to apply this understanding when scouting for new collaborators and team members. They are well aware of their own gaps in this regard.</i>	
<b>12. Bioregional Governance</b>	<i>Currently, BT is the only organisation actively involved in introducing bioregional framing to governance in Tayside –essentially governance that combines ecosystem-based decision making with community participation and self-determination, decentralised and place-based governance and regenerative economics and stives for sustainability and a balanced relationship between humans and nature. BT is exploring Adaptive Governance (AG) models through its participatory science and watershed restoration work. AG aims to connect human actors and institutions at multiple scales to enable ecosystem stewardship in service to life. Its relational, collaborative, flexible, polycentric and learning based approach is gaining traction in the field of nature restoration globally. There have been initiatives in participatory governance at a regional level recently, led by Local Authorities, but with small numbers of citizen participation so far.</i>	
<b>13. Bioregional Funding &amp; Financing Landscape</b>	<i>Funding is the most significant constraint for BT at the moment. The work is 100% grant funded and attempts to venture into nature finance markets are proving difficult in the light of the current uncertainty around national policy and corporate confidence. No dedicated instruments or institutions have been established in the Bioregion yet. Bioregional and current mainstream financial literacy is basic within the team but expertise might be accessed locally through universities and financial institutions. Whilst this is being investigated, there is a concern that existing expertise is likely to be focused in the current economic paradigm</i>	
<b>14. Bioregional Communication</b>	<i>Investment in communication is limited by the project funded nature of BT and the availability of directors to undertake communications work gratis. Generally, however, when it does happen, it is quite successful with good feedback. A formalised communications strategy is missing at this point and would help prioritise resource allocation in the future. Bioregional framing, communication styles and intentions could also be more deliberate going forward. There is an ambition to include arts and culture more in BT's work generally, given their power to bring people together, challenge the status quo and enable people to imagine that anything is possible.</i>	
<b>15. Planetary Embeddedness</b>	<i>The team is well connected to many relevant national and international teams and networks. Given its limited resources, it has learned to be highly selective of partnerships and groups to engage with, guided by a set of norms. The most valuable form of exchange at this point is 1-to-1/small groups with trusted contacts.</i>	

It is worth noting that with the work done to date, the team in Tayside is still miles ahead of many other teams who are really just starting out with the bioregional organising work now. The impressive amount of work done in Tayside constitutes an important foundation to any next steps and further developments!

# Results & Insights

## 1. Bioregional Organising Team

### Intro

How does the definition of 'Bioregional Organising Team' from the book fit with your own identity as a team?

All stakeholders in BT are from the Bioregion and the work currently being undertaken is deeply embedded in local communities. But there is no formal design process that guides the way the team initiates, activates or facilitates its work as yet. A lot of the developments are emergent and driven by project becoming real and/or project funder expectations.

**Commented [LS1]:** Worth designing a more structured process for the bioregional organising team to ensure people know what they are signing up for when joining the team.

How did the team come together initially?

In terms of the weaving practices, the team does certainly cultivate trust-based relationships, foster experimental action across its project portfolio, and aim to align stakeholders in a shared vision for the regeneration of the Bioregion. They do not have adequate resources though to deliberately facilitate collective (un)learning or help the system see itself – but recognise that that is a fundamental part of what needs to be done.

**Commented [LS2]:** Review potential for a bioregional learning center / hub - see later sections.

Who are the team members today?

The team initially came together as a group of people living and working in the Bioregion, drawn to the vision for Bioregioning. Rooted in a friendship group of women, they formed an Inception Group in 2019-2020, to help create an identity, provide an anchor for others to get involved and shape early project ideas. Key figures from this early stage were Clare, Marion and Russell. As the initiative grew and strengthened connections to other Bioregional initiatives in the UK and the US, in 2022, the team formally constituted as a Community Interest Company (CIC), with Marion, Kevin, and Clare serving as the first directors.

The bioregional organising team in Tayside consists of a small core group (board of directors) most of whom have also been key members of the Inception Group.

- Clare Cooper – Co-Director of Bioregioning Tayside, doing the heavy lifting on stakeholder engagement, fundraising and project coordination and delivery
- Dr Marian Bruce – Co-Director of Bioregioning Tayside, a biologist specialising in biodiversity and business owner in the bioregion
- Kevin Frediani – Co-Director of Bioregioning Tayside, has a background in curating living and cultural heritage and is an experienced manager and leader of change in the land use sector.

### Team

Are you working with volunteers?

The team is not working with volunteers per se. The conversation around this topic highlighted the need for a more complex spectrum of roles beyond the "industrial-scale volunteering" that was expected of communities in Scotland by national and regional government, other public bodies such as Visit Scotland and funders, which most communities agree is no longer an acceptable way to make change happen in Scotland. There is also recognition that managing volunteers requires significant effort, resource, and coordination that BT cannot currently resource and that the appropriateness of working with volunteers also depends on project needs. The spectrum of "volunteering" might need to be expanded to account for different levels of responsibility and right to compensation.

How did the team grow till now?

What's the energy like in the team?

The energy within the team is rooted in long-standing trust and complementary skills. Team members have worked together for over a decade, sharing common values and dividing responsibilities based on strengths and availability.

The common values that enable the team to work successfully together hasn't been made publicly explicit, but it is there and creates the foundation that enables the current loose structure to operate reasonably well for now.

**Commented [LS3]:** Maybe need to make a step beyond close circle of trusting friends? Grow some independence? Otherwise might risk non-compatibility with real life out there.

**Commented [LS4R3]:** Mature BT's org structure

### Capabilities

Do you have a plan for how to grow your capabilities / skills as a team?

The beginnings of a more expanded team structure is under discussion, focusing on developing a flexible, collaborative, learning based and polycentric team involving a 'Backbone' delivery team and Bioregional Animateurs rooted in each sub catchment of the Tay system which make up the Bioregion, supported by a range of relevant expertise.

**Commented [LS5]:** Could be worth having a development plan both for the BT team as a whole and its individuals.

What are team members' backgrounds and what Competencies Qualities and Attributes do they bring?

- Clare Cooper – With a background in global arts and culture, Clare's experience of being an independent creative producer enables her to take a big picture approach to pulling people and money together to make often large scale highly imaginative activities happen. Creative producers have been documented as being highly organised, relational "possibilists" and shapeshifters who can help push forward collective ambition.
- Dr Marian Bruce – As an ex-research scientist Marian brings significant biological expertise in genetic analysis of biodiversity and restoration ecology. Combined with her practical knowledge of regenerative land management from her own family farm, community development experience locally in Perthshire, business and natural capital/carbon accounting, her skills form core elements relevant to bioregioning.
- Kevin Frediani – is an experienced manager and leader of change in the land use sector. With a background in curating living and cultural heritage that raise awareness and help conserve more than human, he leads a landscape living lab that helps to facilitate education for sustainability, be a portal for human ecology and demonstrate the role of Nature-based Solutions. He believes in the power of spaces becoming more sustainable places through the imbued emotion of people engaging with their environment.

What's the mix of senior and young energy like?

The core team is currently in the over 50's age range at the moment, but age ranges of those involved in individual projects and their delivery is more diverse. The team find enormous value in diversity of age groups and seeking out, embedding and valuing the different energies that this brings is a key goal in the growing BT team.

What do you usually outsource because you don't have it in the team?

Technical expertise is usually outsourced, such as tree planting, hydrology expertise or GIS specialists to help turn the ecological baseline assessment of the River Ericht catchment into a StoryMap that was more accessible publicly. Similarly, nature finance expertise was contracted in to the River Ericht Catchment Restoration Initiative. Two postgraduate students have also supported the core team collecting data as part of their placements.

## Internal Governance

What are the roles and responsibilities in the team?

Everyone has multiple roles. They are implicitly agreed upon rather than explicitly defined and assigned and are primarily shaped by everyone's availability in the light of other professional responsibilities and commitments. Marian for example excels in scientific analysis and quick sense-checks on a wide variety of issues while Clare handles the fundraising and project management. Kevin brings valuable connections to city and international networks through his academic work, adding a broader perspective. Together, their different personalities and energies and their high levels of professionalism and mutual trust, create a balanced team dynamic, which in turn creates a collaborative and supportive environment.

**Commented [LS6]:** Might be worth making role division in the team more explicit and 'institutionalising' a bit more? Maybe even some sort of an organigram?

What is the relationship between the roles?

Are there leaders per project?

There are different compositions of leadership for different projects, recently, these have included a formal Steering Group for the River Ericht Catchment Restoration Initiative where members were paid to participate in a set of sessions over a particular time period. Other projects are coordinated through the core team, often working with a 'Weaver' with special knowledge and connections in a specific project topic area.

**Commented [LS7]:** Possibly look at stricter delineation between projects and backbone work going forward as BT matures.

What's the hierarchy of roles?

The hierarchy within the team is fluid and project-based, with roles determined by expertise, ability and availability rather than formal titles. As the lead project manager, Clare sees herself more as a coordinating voice than a leader, comfortably deferring to those with specialised knowledge, particularly in areas like nature finance and ecological restoration. Leadership shifts based on the demands of each project; for example, Kevin chaired the food conference 'Feeding Tayside Through The Climate Crisis', while Ruth, BT's Food Ambassador, handled speaker curation. There's no rigid structure or competition for roles—leadership emerges organically from those best suited and available for the task at hand.

Plans exist for creating a group of 'Bioregional Animateurs' drawn from the 8 river catchments that make up the Tay River system. These people would become the key animators of change as they are closest to the grassroot communities and can facilitate real emergence of projects. They could be supported by a wider team for of technical expertise of various kinds plus the Backbone delivery team responsible for fundraising, finance, communications, learning journeys etc. The Directors legally responsible for the CIC would be part of a polycentric governance approach.

How are decisions made?

For each project thus far, decision-making has been inclusive and involved everyone necessary, with regular sense-checking to ensure consensus. The process has been organic, without a rigid structure or formal methodology, but focused on keeping everyone aligned and comfortable with the direction and ensuring contract delivery.

Is there any review process for this governance structure?

Since governance structure is not explicitly defined, there is currently no deliberate review process outside of that required legally for a Community Interest Company.

**Commented [LS8]:** Regularly reviewing BT's governance structure will become necessary if and when the team and work grows rapidly.



## Capacity

Is there enough capacity to hold all the work?

Currently, the team is stretched too thin, with much of the day-to-day delivery falling to Clare. This includes fundraising, project management, contracting, communications and general administrative tasks, which is unsustainable. While the team regularly discusses ongoing projects, they have only just begun having a strategic conversation about creating a more sustainable structure.

Is there more demand for projects than you can hold?

What is the stress level like?

The stress level in the team is significant. They are consistently overextended, with Marian running her own business and Kevin juggling his day job as Curator of the Botanic Gardens in Dundee alongside their bioregional work and Clare juggling other responsibilities for her tourism business and the Cateran Ecomuseum of which she is a Founder Director. The team is operating with limited resources, often contributing substantial unpaid time and effort to ensure project delivery and future planning. Funding uncertainties and the need to constantly seek new sources add to the pressure. Additionally, the team is grappling with broader environmental concerns and the challenge of maintaining hope in the face of the enormity of the 'polycrisis'. The team recognises the need to develop new competencies, qualities and attributes to navigate these stressors effectively, particularly in terms of project execution and psychological resilience.

**Commented [LS9]:** Would be good to have a conversation about how projects are initiated, whether it's through money or through ideas or through needs or through energy, etc.

What are your ambitions to grow the team?

The first wave of team expansion would be to build the backbone delivery team to have dedicated resource that could involve more people in communicating the concept of Bioregioning, building the collective vision and developing the governance structure. BT also aims to curate a group of relevant experts from the Bioregion who could be called on to work on specific projects. Dedicated specialist fundraising support to enable continued delivery of existing projects would also be part of this first wave of expansion. These roles would help shape and fill out the Bioregional Regeneration Strategy Document, essential for developing the Bioregional Financing Facility.

If the portfolio of projects was to grow, there would also be a need for dedicated people management expertise to support what would be a growing and diverse team delivering projects.

This team would include "Bioregional Animateurs"—locally based people in each of the 8 sub-catchment areas who could facilitate ground-level engagement, constantly sense-check with local communities, and feed insights back into the collective. Their roles could be supported by other specialised roles like fundraisers, technical advisors, and storytellers, creating a more distributed and sustainable capacity for the work.

People with 'Producer' CQA's (see previous page) would be key to an expanded BT team, able to continuously enable and support imagination and ambition.

**Commented [LS10]:** Leon said: "We can't think of all the institutions that are part of this in one way or another as separate entities. Additional capacity in one organisation might free up capacity to support something else in another organisation. And so there are all these interdependencies, which I think would be fantastic to map and see who are those organizations that are really closely entangled with the work that you're doing, and then maybe, what are the kind of outer circles of who are less entangled and less interdependent with both the value that you create and also the costs that you have. Also to be able to do Risk Management, for example. If something goes wrong in Marian's business, then a whole lot of things could be on hold for BT."

Do you know where to go to grow your team's capacity if you wanted to?

Local community anchor organisations across the Bioregion could help identify Bioregional Animateurs, the arts and cultural sector could help find Producers and the higher education and research institutes based in the region are a source of specialist expertise. However, there is a need to design new infrastructure to support the development of people with all round bioregional CQA's and this is one of BT's planned projects.

## Funding

What are the main sources of funding for BT?

The main sources of cash funding for BT include NatureScot, the Scottish Rural Network, Perth & Kinross Community Led Local Development, Dundee City Council, Scottish Enterprise, and the Esmée Fairbairn Foundation. The "Communities Monitoring Landscape Change" project has received £17,500 from NatureScot over 3 financial years. The "Feeding Tayside Through The Climate Crisis" project has been supported by 3 grants from the Scottish Rural Network and Dundee City Council, totalling around £60,000 over 3 financial years. The "River Erich Catchment Restoration Initiative" secured £125,000 from the Esmée Fairbairn Foundation for its 1-month design stage.

The public and philanthropic sector funding environment in Scotland is very challenging at the moment. This means massive competition against other organisations, many of whom are trying to maintain their status quo.

The Nature Finance (private finance for nature restoration) field is immature and facing headwinds in relation to verification standards, appropriate public policy frameworks and landowners' appetite for risk.

How are you doing financially?

Financial constraints are substantial across BT's portfolio. A lot of work is done unpaid, especially by the directors. Whilst unpaid work by volunteers is often seen as a proof of community backing and as in-kind part of the match funding, the expectation of what is being described as 'industrial scale volunteering' for much community-led work in Scotland is unsustainable.

Which funding sources have you tried that didn't work out?

The team undertakes very targeted fundraising for project ideas that have emerged through conversations with a broad range of local actors over the last two years. So far 95% of this fundraising has been successful. There is no paid resource available to undertake general fundraising.

## Risks

What are the main internal risks you're thinking about with regards to your team's work?

Key person risk is the most significant in the current structure. As the team develops, being unable to find enough people with the right (inner and outer) CQA's and the experience and psychological strength to do this difficult change/transition work - of being a 'long disaster responder' - is also seen as a major risk.

There is a risk of not communicating out to the public in the right way.

There is also a competition risk of incumbent organisations working in a somewhat similar field but not with a bioregional focus absorbing all the available funding and using it perpetuate 'Business As Usual'.

**Commented [LS11]:** There is potential for UK wide partnership on building a research agenda that, for example, includes this topic.

What are the main external risks you're thinking about with regards to your team's work?

Extreme weather events are a huge risk to current projects in delivery, e.g. flooding of river and destruction of infrastructure could put the whole River Ericht Catchment Restoration initiative on hold. Predicted climate change will affect food production across the Bioregion. This is relevant to BT's current food project on strengthening and developing community-led food growing.

There is growing concern about the Bioregion's lack of a holistic adaption strategy, especially in the light of the risk of not taking into account cascading risks which could lead to a chain reaction of negative impacts, or the interlinked nature of climate change, biodiversity collapse, food, water, health crises

There are also risks associated with management of and accessibility to data on a wide range of topics held by many different organisations regionally and nationally that are material to BT's current and planned work.

## Other

How do you celebrate achievements as a team?

The team go "yay" in calls and Marian and Clare have a regular 'girls' night' with other friends on Thursdays where they share achievements and celebrate. Usually there is not a lot of time to celebrate. The team receive a lot of great feedback though, which keeps them motivated.

What would be a dream come true with regards to the team?

Right now (December 2024): Funding to get the River Ericht project to the point of delivery, to build the "Communities Monitoring Landscape Change" into a Landscape Observatory, more resource to the drive food systems transformation project and develop the Bioregion wide nature finance aggregation platform.

Also Scottish and Regional Government backing/recognition that bioregioning and working together at a community-level is key to a nature positive future.

## 2. Bioregioning Tayside Operating Model & ToC

### Legal Structure

Is BT its own legal entity? If so, what legal form? And what are pros and cons from your perspective, given your local context?

BT is a community interest company (CIC). The team considered multiple options but decided for CIC, because of its flexibility – CIC's can combine business activities with social goals; it is transparent – you have to submit a public report, which shows that the CIC is still meeting the community interest test and that its activities are still benefiting the community; it allows you to access a diversity of funding, grants, donations and community financing; it has Limited liability and it allows directors to be paid. Its Asset Lock requires funds to be used for social objectives and it isn't nearly so onerous in terms of reporting as a charity.

Have you considered incubating it in an existing organisation?

It wouldn't be obvious which organisation that would be in Tayside. There isn't one organisation that works in this area, or does this kind of holistic / ecosystem-wide work. There are many "legacy organisations" in the region working in aspects of nature restoration who are struggling in the current operating environment.

### Role of the Organisation in the Bioregion

What role do you see BT play in the Tayside bioregion?

So far the team have felt very much that they are enablers and catalysts, rather than anything more concretised. That feeling of fluidity and being able to be fleet of foot is an energy the team enjoys working with. They see themselves as "host leaders" valuing feminine energy, not as 'hero leaders'.

The team have gathered a significant number of contacts across the Bioregion and want to build BT's capacity to bring those together.

"This is actually us working to enable lots of people who have similar anxieties or similar problems or similar work that they want to achieve within the landscape, and enabling everybody to work together." This is different from a lot of other eNGOs.

What role do others see BT play?

People are looking for a leadership that crosses the Bioregion, rather than one that is siloed within a particular interest group in a shire or a city. People want to connect to each other across the Bioregion, and there isn't a vehicle through which they can do that easily.

The enabling set of bioregional values, the non-political agenda, the absence of ego about the organisation and the work have all been commented on by others and appreciated by the team.

The technical knowledge BT is beginning to build up in e.g. nature finance or watershed restoration is beginning to be recognised by other organisations in the Bioregion, who are now coming to BT for advice.

People respond positively to the immensity of the vision for the whole Bioregion and feel drawn to it.

Are there other organisations that play a similar role?

Not really at this point.

**Commented [LS12]:** Might be worth doing an updated version of the statement of activities and link it to strategic goals, theory of change etc.

**Commented [LS13]:** Seems like external stakeholders have varying ideas of what BT is about. Maybe worth harmonising with internal perception of what the org is about?

**Commented [LS14]:** How can other organisations be catalysed / accelerated to perform similar or adjacent functions to BT?

### Vision & Mission

How clearly defined is BT's vision?

There is a vision statement on the website. "Our vision is for a flourishing and resilient Tayside bioregion based on care for the natural world and each other". But it was developed primarily a communications tool. There was not a team process to arrive at it.

How clearly defined is BT's mission?

CIC's require a Community Interest Statement when incorporated. For BT this is: "The company's activities will provide benefit to the human and biotic communities of the Tay River catchment by carrying out activities that support the regeneration of nature."

The team acknowledges that these are opening statements which will need to be revisited and evolve over time.

Does BT have a defined Theory of Change?

Not at this point. The ongoing capacity issues means there has been a lack of time for this foundational work. The primary methodology used by the team is the 3 Horizons framework.

The ToC process needs to be inspiring for people though – not a "must-do", and it needs to take a systems approach. There is a need to look at and critique how ToC can best be used in complex systems work like bioregioning.

**Commented [LS15]:** Might be worth spending some time on a Theory of Transformation in the next maturity phase of the organisation. Need to create space and budget for that.

**Commented [LS16]:** Need to develop a ToC that is not linear but embraces ideas of complex systems change.

Do you have strategic goals for BT?

Not at this point.

How do these elements influence your day-to-day work?

### Strategy



How do you derive strategy for BT? (deliberate / emergent)

It's likely a bit of both. BT is clear about the general direction of where things need to go. But how to get there is really not clear, there is no clear river to go down.

**Commented [LS17]:** Good to train a muscle in identifying when in the work one is more guided by the flowing river and how its been mapped/analysed and when it is all more emergent and navigation is based on weak signals and cues from the field.

Do you think you increase possibility?

There is a clear acknowledgement that there is no point in doing this alone. Boats will have to cross paths. And there needs to be a strategy for how to collaborate with multiple people and organisations working in the bioregion. And sometimes it's about slowing down the river so there is enough space and capacity to work with others (including other than-human partners).

Do you organise your work in strategic pillars?

Not really, projects have emerged organically, building on local energies and available funding. Currently the work is clustered around big themes such as water, food, community involvement in landscape change and landscape restoration.

**Commented [LS18]:** Defining strategic pillars is potentially one of the things to look at soon. Seek inspiration from how all the other bioregions are doing it.

### Learning

How does BT crystallise and use learnings?

There is not really a lot of time and space to deliberately reflect on learnings apart from those Thursday nights with gin and tonic or wild botanical spirit in hand. Clare mentioned that there is a need for a dedicated person, a historian/horizon scanner, who is recording developments as they unfold and helping to make sense of them in the current operating environment. The transcription and recording of the emergence of ideas on Basecamp platform of the Scottish Nature Finance Pioneers is a place where this is happening – but not for BT yet.

**Commented [LS19]:** "Learnings management" might be another pocket of work for phase 2. Would need to start with understanding what team members' expectations are towards a learning infrastructure like this.

**Commented [LS20R19]:** Maybe establishing a regular meeting or set of meetings to do this should be a next step.

Is there enough space to reflect and make sense of weak signals?

How do you translate learnings into new action?

### Cooperation

Do you collaborate with organisations locally?

The team have partnered with many others, often in a very integrated way. An example of this is around different partners offering to be fiscal sponsors for different kinds of money "We need to get money. You're a charity. You make that bid, we'll make this bid, and then together we'll pool it, and there's sufficient trust for us to make the project happen. I love working like that, and everything I have done in Scotland so far has been enabled through different fiscal sponsorships and deep relationships with people who we trust."

The groundwork for this approach actually started through Clare and Marian collaborating before BT, through different organisations to make projects happen.

What is the culture around collaboration like in the bioregion?

BT is actively building it. There is generally an openness and willingness to engage.

### Other

What are the physical infrastructures you rely on for your work?

### 3. Bioregional stakeholder & relationship mapping

#### Process

Was a structured stakeholder mapping done?

There have been multiple attempts at mapping stakeholders.

The first one was during Glenn Page's course in 2020 when BT was not yet formed, this used the Bull's eye methodology.

The second one was done when doing the website. This one was rather small (10-12 nodes), done by an MA student who wanted to help.

Early on, Clare and Marian also did individual network maps for their own connections because they recognised that actually a lot of what they were building was based on their own personal connections to various organisations within the landscape through different kinds of work that they were doing, or different people that they'd encountered along the way. The purpose was to see the overlaps and the reach of their personal networks within the landscape.

Another one was with ETH Zürich for the River Erich Catchment Restoration Initiative. This used more of a flow diagram methodology. This one was less helpful for the BT team as there ended up being too many lines everywhere and it was quite generic groups (not specific people). Often these things are quite obvious for people who live in the bioregion and they don't feel the need to map them. Another map was done for the Erich project to map the activities of the project against SDGs and UNEP guide for ecosystem restoration.

Another one was for the food project which has mapped community-led food growing initiatives across the Bioregion.

When the website was first set up, a postgraduate student helped pull together a set of projects already happening in the Bioregion, which could act as exemplars for others. If there were resources to do this, there are probably some 80-100 projects that exemplified Bioregioning could be mapped now and stories to be told about them.

Have the mapping exercises included a more qualitative description of individual players' motivations or willingness to participate/contribute to bioregioning, or their resources and time capacities to contribute?

Not yet. But noticing that motivations of quite some powerful parts of the system are changing quite dynamically – question how to map that so it doesn't end up out-dated quickly.

**Commented [LS21]:** Would be good to try and pull all of those projects into one place and update as well as developing a standard approach to mapping.

**Commented [LS2R21]:** Mapping is one of the most powerful things of bioregioning - to make visible what is currently not visible.

**Commented [LS23]:** Might be worth getting more qualitative in the new approach.

**Commented [LS24R23]:** Having and maintaining an overview of stakeholder networks and building relationships are two of the main value adds of bioregional organising teams. Worth strengthening.

Have you mapped stakeholders' challenges, dreams, inspirations, and ambitions?

Not yet.

Have you mapped the relationships and dependencies among stakeholders?

Not in a detailed way, no.

Have you mapped challenges and conflict?

Not formally, no.

Do you have an understanding of who stands to gain/lose the most? (pains & gains analysis)

Not yet.

**Commented [LS25]:** Might be worth making a map of stakeholders who stand to feel pains & gains from bioregioning work to identify high potential leverage points.

Do you have an understanding of who has the most impact / influence on affecting change (or blocking it)?

No formal assessment, no.

Have you used AI support in the scraping of stakeholder mapping?

Not yet, but would be great to explore.

#### Stakeholder groups

What is the role of the different stakeholder groups (see p. 51 of the book) in your bioregion?

What is the role of SMEs in your bioregion?

Many of them don't prioritise thinking about the topics BT are prioritising and would need capacity building to engage with the concepts of bioregioning.

What is the role of multinational corporations in your bioregion?

What is the role of NGOs and not-for-profits in your bioregion?

What is the role of Indigenous communities in your bioregion?

North and West of the Highland Boundary Fault was primarily Gàidhealtachd (Gaelic speaking) until the agricultural revolution although this has almost died out now. The Scots language now prevails, often captured in stories of place (see the work of local storyteller and historian Dr Erin Farley <https://thehistorypress.co.uk/publication/angus-folk-tales/>).

Other indigenous communities are the clan networks, again north of the Fault Line, and the Scottish Traveller Community. Both are, like the Gàidhealtachd only faintly visible today.

Highland Games are still very popular as is Scottish traditional country dancing.

There is still a prejudice to "incomers" despite the fact that it is often people that are new to a place that initiate projects, build new communities, "do stuff" – more so, often, than those that have always been there.

What is the role of agricultural community in your bioregion?

Very significant. Although relevant to note that the farming community is often not well integrated into other town-based communities of place.

Have you mapped and engaged with all the stakeholder groups (see p. 51 in the book)?

## 4. Multi-stakeholder engagement process

### Process

How many stakeholders have been invited into co-creating the bioregional work so far?

So far, this has been very project-driven. Hundreds of people have been engaged in the different projects.

What has the bioregional engagement process looked like so far?

People are usually not explicitly engaged in "bioregioning". Usually, they are part of relevant networks and engaged through different facets of the work (e.g. the catchment restoration work, or community food growing).

**Commented [LS26]:** Maybe part of the next maturity phase is also about making the concept of bioregioning more visible to unlock currently invisible potential?

The team feel it is important to emphasise how complex and important the work of holding relationships is (depends a lot on timing, personality, reputation, words used, etc.) which is why it's usually not really possible to bring someone completely outside of the Bioregion in to do this work.

How do you build trust among stakeholders?

The trust in an organisation is always tied to the success of the last project it has done unless you are really transparent about the fact that you're learning as you go along.

The trust built has been over 20+ years of living and working in the Bioregion and is based on many personal and professional relationships across multiple organisations.

The quality of work is really appreciated by people, they will notice if you have gone the extra mile. And humility is also generally appreciated in Scottish culture, not portraying yourself as an expert but someone who's just doing their best.

Also, adjusting language to different stakeholder groups is critically important, as well as being able to shape shift.

Did you follow any specific methodology?

No underlying methodology used in any disciplined way so far.

What format did you use? Interviews, focus groups, workshops, other?

Primarily face-to-face through project gatherings and meetings. Some workshops but there is facilitation capacity lacking in the team to do more of that. Maybe there needs to be more digital engagement to also involve other stakeholders?

Need to make sure that there is a variety of ways and formats for people to engage because otherwise some people just won't say what they actually think.

Did you do co-sensing workshops with people from the bioregion to identify systemic barriers?

Not explicitly, no. But some exercises in the projects have had an element of that, for example the food work began with a Learning Journey to visit food producers across the region and hear about their challenges.

### Engagement

What is the on-the-ground willingness and openness towards a bioregional regeneration approach?

Not much knowledge about the concept yet. Hence difficult to judge.

What is the felt sense of responsibility of citizens of the bioregion?

The scale of the felt kinship is usually smaller or larger than the bioregion (community or nation). Tayside as a place is not too much of a thing for people.

There is a huge disengagement that has happened due to land aggregation in Scotland (very few landowners now). People have little incentive to care for the land.

People have a sense of responsibility for the social community side of things. At the same time, people are part of multiple nested communities.

What is the felt sense of responsibility of organisations and businesses of the bioregion?

Similar to that of individuals.

What is the state of collaboration / cooperation across the bioregion?

Generally, there is a positive attitude towards collaboration, also due to push in the last couple of decades.

### Changemaker Density

What is the overall changemaker density of the bioregion?

## 5. Bioregional Assets & Liabilities

### Asset & Liability Mapping

Have you mapped landscape-level and community-level opportunities and assets?

A lot of asset classes are implicitly known to BT. But no formal map done for the entire bioregion yet. Some similar mappings exist at the project level.

**Commented [LS27]:** Might be worth doing an easy, non-in-depth, exercise to list opportunities & assets for the regeneration strategy document.

Have you mapped landscape-level and community-level risks and liabilities?

Other organisations, like the Tayside Adaptation Partnership and Scottish Government (Scottish Resilient Communities Conference 2024), have done maps. But not BT specifically.

Have the potentials for things like carbon sequestration etc. been mapped?

Not necessarily neglected but those that came to mind right away were the following.

Check list on p. 54 of the book whether anything stands out as neglected at the moment.

Assets:

- Most valuable farm land in Scotland
- Significant higher education institutions
- Big tourist attractor because of the different landscapes
- A lot of clean fresh water (still) and most of other natural assets listed
- Very particular climate (sunshine bioregion of Scotland)
- Great heritage and historic and archeologic sites that stretch back to the last ice age (mostly not known to people though --> dormant asset)
- Accessibility / infrastructure is not that great to move about the bioregion --> asset because it is good for nature
- Sparse population too
- Community resilience is strong

Liabilities

- People have lost their connection to and understanding of nature at their doorstep
- Similarly with the cultural heritage that could be an asset
- There is a low sense of agency amongst many people because for generations people didn't have a say and people are glad to defer to the government/council on many issues ("that's what I pay my taxes for") – language (e.g. in the media) and other subtle but powerful structures perpetuate such worldviews and behaviours

Have you assessed the potentiality vs. actuality of something being an asset or a liability?

The importance of making this distinction has become very clear. There is lots of potential for assets to be "activated" but they are currently "dormant".

Have you mapped who has what control over and influence on assets and liabilities?

Not necessarily done for all assets and liabilities but aware of the importance of this aspect.

In the mapping, have you used any particular framework or reference any methodology such as the 4 Losses and 4 Returns?

No but keen to find congruence with other bioregions and build on existing learnings.

### Value Flow Mapping

Have you mapped not only the static stocks of value or risk but also the dynamic flows of both between actors, places etc.?

### Process

For those mappings, what process did you use?

Do you have a process to update the information continuously?



## Product

Where do you synthesise and join up all the information?

BT has been part of early-stage conversations around the development of a bioregional digital twin, but this seems to be dormant at present. During the design of a monitoring, reporting and verification system the team will assess different systems to enable storage, analysis and interpretation of historical, current baseline and ongoing multiple data collections are collated and stored to enable accurate reporting and storytelling.

How do you share the information?

It really depends on what the information is.

With whom do you share the information?

Flooding risk, for example, would be very beneficial for all citizens at a street-by-street level.

Often ordinary people don't have the technical knowledge to interpret data (such as geospatial data).

The primary target group of the overall data visualisation however is probably BT itself to help steer projects and make well-informed decisions about new initiatives to start and support.

**Commented [LS28]:** Some sort of intelligence function around bioregional health could be useful going forward as BT distributes its leadership

Do you use the information to understand potential levers for systemic change and to establish a high-level Theory of Change for the bioregion?

Based on the mapping that was done within the different projects, yes.

## 6. Project Portfolios & Synergies

### Past Portfolio

**What projects existed in the past?** Not many. Some came to a natural close. Several projects were proposed but never started because there was a lack of funding. All end up in the list of project ideas that are bubbling and might be picked up in the future as conditions are riper.

### Current Portfolio

**What projects are currently live in the bioregion?** Four projects live:

- River Ericht Catchment Restoration Initiative (RECRI)
- Feeding Tayside Through the Climate Crisis
- The Role of Community Science in Monitoring Landscape Change in the Tay Bioregion
- Bioregional Governance & Finance

**Is there a dashboard that indicates all live projects and their progress?** Yes, they are portrayed on the website and people are regularly updated through the newsletter with invitations to get involved where useful.

**Do you communicate about projects openly enough so that people can get engaged?** Yes, where useful and when there is capacity to manage that engagement.

**What scaling strategies have been employed so far?** The team are exploring an idea of cooperatively buying and selling all sorts of outputs from the bioregion, including carbon, biodiversity, and working at a larger scale, and bringing everybody together into a single marketplace, and allowing the economies of scale to work in the favour of the bioregion. But so far, BT has received funding to pursue it further.

Exploring the scaling and replication of successful approaches within the bioregion (e.g. River Ericht Project)

**Have you mapped business cases that exist in the bioregion?** Not formally but explored various examples in the past. From biodiversity and carbon markets to cultural and tourism markets.

Businesses like Highland Boundary are established with the intention to create a bioregional business and scale work from own farm to bioregional/landscape scale.

**Is there a local market for bioregional products and services?** Yes. And lots of business opportunities. But as yet few start-ups are coming into this space. And if they do, they don't frame it as regenerative or bioregional business opportunity. Also because the business support environment tends to primarily promote traditional business ideas and approaches.

**Commented [LS29]:** Is there a potential for a bioregional / regenerative business model offering (incubator/ support clinic/ meetups/ ...)?

**Commented [LS30R29]:** Scotland Big Picture Northwoods Network is already providing some of that

### Synergies

**Have interlinkages of projects been mapped so far?** Not in a strategic and systematic way.

**Have possibilities for combinatorial effects been mapped?** Not in a strategic and systematic way.

**Have leverage points been mapped?**

### Future Portfolio

**Do you have a space where you capture project ideas that you cannot implement right now but might be able to in the future?** Yes, there is a whole list of things bubbling in the background.

## 7. Bioregional Visioning

### Introduction

Do you know what identity people derive from and find in the Bioregion?

People have their different communities (occupation, hobbies, volunteering, etc.)

- Occupation: Farmers strongly identify with their profession and specific farm location rather than nearby towns.
- Place of residence: Non-farming residents often identify with their town or village.
- Work communities: People who commute to cities like Perth or Dundee may have a dual identity tied to both their workplace and home.
- Interest groups: There are many local interest-based communities, like musical societies or sports clubs.
- Outdoor activities: Dog walking and golf are popular, connecting people's identity to the landscape. People live on the country side so that they can have a dog.
- Scottish identity: There's a growing sense of pride in being Scottish, especially in contrast to England.
- Retirement: The region has a high proportion of retirees, whose identity may be more place-based.
- Pet ownership: Having a dog is very common and can be a significant part of people's identity and daily life.

While not explicitly framed as "bioregional," many people's identities are tied to the local landscape, whether through farming, outdoor activities, or simply living in the countryside. However, there's generally a lack of collective bioregional identity or awareness.

Pride to be able to say you live in Scotland has grown over the years, particularly as England turned into what it turned into.

Do you know how people locally define bioregional health, wellbeing or welfare?

People in Tayside generally consider access to nature, nutritious food, jobs and housing as key contributors to their well-being. Living in the countryside for access to open green spaces is a major reason many choose to reside in the area. The natural environment is seen as important for physical and mental health.

Are people aware of other human and non-human's well-being?

However, there are significant challenges to well-being in the region. Mental health issues are prevalent, especially among farmers who face isolation and financial pressures. Drug problems exist in both urban and rural areas. Young people's well-being in particular is often described as low due to lack of connection and access to services and leisure facilities.

While the bioregion's natural assets contribute positively to well-being for many, the full potential is not realised. Until recently (5-10 years ago), it was difficult for residents to access local produce grown in the area from farm shops, for example. The disconnect between food production and local consumption is seen as a symptom of a broken system.

There's growing awareness that things need to change. However, most people remain primarily focused on their own individual well-being (instilled as early as school age) rather than considering the health of the wider ecosystem or community. The prevailing mindset is still largely anthropocentric, with limited consideration for the well-being of other species or the land itself.

### Product

Is there a bioregional vision that a group of critical stakeholders implicitly or explicitly agrees on?

The efforts to develop a shared vision for Tayside's landscape and future have been limited so far, primarily due to resource constraints. Some key points about the current situation:

1. Most work has been done through specific live projects, with the Erich project being the most advanced in terms of long-term visioning. Those involved understand it as a 100+ year, multi-generational effort focused on regeneration.
2. There's no comprehensive data on where the entire bioregion stands regarding a shared vision. Estimates suggest 20-30% of people may realise changes are needed, even if not fully engaged with regenerative projects.
3. Local authorities have launched some initiatives like "biodiversity towns," but these tend to be small-scale due to lack of resources. National and international initiatives such as 30x30 offer top-down visions but there is no way to operationalise them and they are not developed by people on the ground.
4. The team has previously been involved in leading stakeholder meetings, like one for the Cateran Ecomuseum as a Regenerative Tourism destination, to gather ideas and discuss potential changes. These generated energy and engagement.
5. The food-related work has developed a vision around generating "social tipping points" for behaviour change, involving stakeholders across Tayside.
6. There's recognition that any visioning process needs to offer tangible value to participants, not just be another consultation. Ideas include:
  - A "roadshow" approach, visiting different areas to share achievements and gather input
  - Combining visioning with cultural events or experiences to make it more engaging (e.g. "Why Not Scotland" screening)
  - Focusing on specific themes like food systems where work is already underway
7. The team sees potential in developing resources to help communities engage more effectively with land use decisions and planning processes.

Overall, while some groundwork has been laid, there hasn't yet been a comprehensive, bioregion-wide visioning process due to resource limitations.

It seems important that not all people need to have a direct relationship with BT.

Is there a document or other form of capturing for the bioregional vision?

Not yet.

Does the document explicitly refer to bioregioning? If so, does it clarify what is meant by it in the local context?

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## Process

What was the process like to arrive at the shared vision?

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Did it involve people writing down their own visions for the bioregion?

/

How was the aggregation and level-scaling done?

/

## Outcome

How is the vision or manifesto used today?

/

## 8. Bioregional Regeneration Strategy Document

### Product

Based on the vision, is there a document that outlines a future strategy for the bioregion?

Not yet.

**Commented [LS31]:** Worth putting together a document that signals a grand vision to the outside world and can be the basis for discussion with local stakeholders about what their version of the vision is. A document like this becomes the investment thesis for any BFF to be developed.

Does it visualise the bioregions (e.g. maps, photos, quotes)

/

Does it describe values that are held dear in the bioregion?

/

Does it include an assessment and diagnosis of the current state / status quo of the bioregion (both land and people)?

/

Does it define strategic pillars or areas of work to focus on?

/

Does it describe projects that are currently active?

/

Does it describe projects that are still to be set up?

/

Does it detail how to measure success?

/

Does it include a visual or diagram that summarises the strategy on one page?

/

### Process

What was the process like to arrive at that strategy document?

/

Was the number of people and organisations co-creating the vision representative of the bioregion as a whole?

/

## 9. Bioregional Hub Function

### Story of Place

Is there a story / history captured about Tayside bioregion?

How is that being made accessible or what is done with it? Is it being told?

Do you think the bioregional scale would become more apparent if stories from all over the place would be brought together?

The stories around Tayside and its sub-regions are diverse and fragmented. There are no stories specifically about the “bioregion” as a concept. Existing stories are held by various organisations depending on their content:

Scientific stories are found in institutions like the James Hutton Institute, local authorities, University of Dundee, and Perth College. These include landscape mappings and scientific papers (landscape diagnoses).

Cultural information for Perth & Kinross is centralised in Perth City, Angus seems to have less resource. In both ‘shires’ cultural centres are being closed down in rural areas. The University of Dundee and Dundee City Council houses cultural information for Dundee city and surrounding areas.

Local history groups, both cultural and natural, exist throughout the region but are not comprehensively organised.

For specific areas, new initiatives such as the Cateran Museum have collected folk stories relevant to that locale on their website. Probably not too many other institutions though.

Historical documents are held by libraries in Perth and Kinross, Angus, and Dundee. The Meffan Gallery in Forfar holds local history. A lot of smaller museums are being closed now due to lack of finance.

On a national level, Historic Environment Scotland in Edinburgh maintains a database of historically important sites, artifacts, and records.

Lots of archaeology is still in the landscape.

Currently, there's no unified approach to collecting or preserving these stories specifically for the Tayside bioregion. The information is scattered across various institutions, local groups, and government bodies.

Collating stories and artifacts related to the bioregion could indeed make the concept of bioregioning more apparent to people. If these materials were curated in a way that draws out a bioregioning narrative, it would help people understand the concept better. The process of collecting and presenting this information in a bioregional context could:

- Highlight the shared history and culture of the area
- Demonstrate ecological connections across the landscape
- Show how human activities have shaped the region over time
- Illustrate the unique characteristics that define the bioregion

By presenting this information in an integrated way, people might naturally start to see the bioregion as a cohesive unit, rather than needing to be explicitly educated about the concept. This approach could foster a more intuitive understanding of bioregioning, allowing people to discover the connections and relationships within their region for themselves.

The Ecomuseum – a museum without walls - is an example of this approach on a smaller scale, where cultural information has been intentionally collected and presented in a way that relates to a specific geography and landscape. Expanding this idea to the broader bioregion could be a powerful way to make the concept more tangible and relatable to residents.

There is an idea to create a bioregional field guide (inspired by [Cascadia Field Guide](#)) as another version of such an approach.

**Commented [LS32]:** A comprehensive effort to gather and curate these stories from a bioregional perspective could be valuable for preserving and understanding the area's heritage.

### Information

What types of knowledge do you draw on to make decisions?

Which policies are contributed to by, or are relevant to your bioregion and in what way?

Who collects project ideas and listens to the system about where it wants to shift first?

Does anyone try to bring back traditional ecological knowledge that was previously held in the bioregion?

Bioregioning Tayside collects project ideas and does some intuitive sensing around the systems. Could be more deliberate though.

Who documents and showcases bioregional learnings right now?

Bioregioning Tayside to a limited degree. Landscape Observatories could play this role in the future and BT is part of a group of organisations looking at the potential of these in Scotland.

### Physical Place

How do you react to Donella Meadows' vision of bioregional learning centres?

Have you considered the potential of an actual physical hub, a place where knowledge comes together and people meet?

Physical places are expensive and often become the focus rather than the relationships and activities they're meant to facilitate. Many such projects in the UK became "vanity projects" and failed, especially after the 2008 financial crisis.

Physical spaces might be needed for certain activities, like skills training. However, the financial challenges of maintaining such spaces, especially in areas not easily accessible by public transport, are significant.

Instead of a single large hub, it might be an idea to establish smaller, dispersed, multi-functional spaces around the bioregion. Possibility of pop-up museum hubs that move around, though having the resources to implement this concept remains a challenge.

A more flexible, distributed approach that focuses on relationships and activities rather than a centralised physical location seems more suited. This aligns with the goal of weaving together existing networks and resources across the bioregion.

A challenge might be that larger museums are safer, have more equipment etc. so they generally believe they are the better place to take care of national treasures from the regions.

### Programme

Do you think people in your bioregion would enjoy opportunities to deepen their understanding of the unique characteristics and challenges of the bioregion?

Do you think they would come to gain knowledge and skills for regenerative living and stewardship of place?

A "bioregional learning curriculum" that could be delivered through a network of existing partners and locations might be an interesting idea. There is value in weaving together current sustainable learning activities happening across the bioregion, rather than centralising everything in one place.

Models like the Birnham Institute and local libraries serve as cultural hubs, they have potential but also financial struggles. Regrettably, local Councils are shutting most rural libraries despite local campaigns to stop closures. The financial support for culture generally in Scotland is dire. Any approach should integrate with existing resources and data collection efforts.

There is a need for spaces that foster intergenerational learning and reconnection with the local environment. Also to teach lost craft and skills. Importance of balancing technology use with real-world experiences in education about place and ecology.

There is value in participatory processes to determine what skills and knowledge are most relevant to local communities. There is a framework being tested by Highlands and Islands Enterprise that asks communities to define their own indicators of success.

Such places could not only help to transfer knowledge but also to create new knowledge through the interactions of people who all bring different perspectives, knowledge and wisdom.

**Commented [LS33]:** What if the value of these bioregional centres was more legible and people would start to invest in them?

### Bioregional Organising Institution

Do you see BT as a non-physical bioregional hub?

### Interface

How do assess the potential for a bioregional hub to be recognised by incumbent governance institutions / public sector players?

**Commented [LS34]:** Would be worth doing a mapping of community organisations and places of education that are already very aligned with bioregioning and leveraging them for a distributed and decentralised way of disseminating bioregional knowledge and behaviour.

## 10. Bioregional Health Metrics and Indicator Frameworks

### MRV

How are you thinking about MRV at the moment?

MRV is seen as a critical but complex component. We recognise the need to integrate carbon, biodiversity, and social impact measurements, moving beyond treating these as separate entities.

For carbon, there are existing UK frameworks like the Woodland Carbon Code and Peatland Code, which operate within the voluntary carbon market. These frameworks include evolving standards for other ecosystems such as salt marshes, soil, and hedgerows. However, despite the robustness of these systems, challenges remain, particularly in balancing investor confidence with the limitations of UK-specific standards that exclude international frameworks like Verra or the Gold Standard. Verification processes are structured but demanding, involving periodic checks that put pressure on landowners, particularly when selling future carbon units before realisation.

For biodiversity, MRV is far less developed, involving a mix of high-tech tools such as satellite data and eDNA analysis, alongside traditional ground-truthing methods. Trials have been conducted using sensory networks to monitor ecological changes, collecting data like water levels, temperatures, and species diversity. BT acknowledges the tension between comprehensive biodiversity monitoring and the need to maintain a manageable scope, advocating for using indicative metrics rather than exhaustive data collection. There is also interest in integrating monitoring tools as management aids, creating feedback loops to adapt restoration strategies effectively.

Social impact measurement is woven into MRV considerations, reflecting a moral imperative to ensure that ecological restoration projects benefit local communities as well as landowners. This perspective moves beyond "stacking" benefits (separately trading carbon and biodiversity) to "bundling" them, integrating social outcomes as essential components. This bundling approach ties into a broader vision of shared stewardship, emphasising that nature is a collective resource. BT emphasises that revenues or other benefits from restoration projects should not solely benefit landowners but should also support local populations, aligning with directives from the Scottish Government and Scottish Land Commission.

Finally, BT situates its MRV strategy within Scotland's unique legal and environmental context, contrasting it with England's approaches like biodiversity net gain and nutrient neutrality, which are not applicable in Scotland. The organisation underscores the importance of tailoring MRV frameworks to Scotland's publicly owned water resources and other structural differences. Ultimately, the approach combines technical rigor, adaptive management, and ethical considerations to balance ecological restoration with socio-economic equity.

Currently, BT is using ArcGIS story mapping to collect data, hoping its flexibility will allow for future adaptations as MRV standards evolve. BT is actively reviewing various global methodologies to determine what's most applicable for their bioregion, while also considering existing government measures and datasets to leverage historical data.

Landscape Observatories could become initiatives that monitor and manage bioregional health data.

Does your set of metrics and indicators integrate into something bigger?

Currently, all metrics are stand-alone measurements. Landscape Observatories could start to pull things together.

**Commented [LS35]:** Would be good to have an integrated framework ready for a BFF to work into and be judged by.

Do you think your current indicator framework is able to capture the complex nature of impact?

Not yet. But working towards integration of multiple dimensions.

For example, the no. of people who would recommend their community as a place to live, represents underlying factors such as crime rates, job opportunities, and schools.

### Involvement

Are the indicators built on community dialogues about what it means to thrive and what is important to them?

Currently looking at various methodologies that do this and figuring out what makes sense for Tayside.

Are the indicators to track progress collaboratively designed?



## Generalisability

Do you think there is merit in having indicators that are universally used across bioregions? Or do these need to be context specific?

At this point, the landscape of MRV methodologies is probably too much of a mess to start aligning. It is important to remain flexible enough to integrate and align with others later on but probably little merit in starting to converge too soon. Social impact measures are also context specific and best practice advises these are locally agreed.

# 11. Bioregioning 'Competencies, Qualities and Attributes' (CQA's)

## Framing

Why are these three words so important for the work of BT?

The discussion highlights the importance of considering competencies, qualities, and attributes when identifying or developing people for roles in Bioregion Tayside, going beyond traditional notions of skills and expertise. This framework originated from work conducted over a decade ago through a think-do tank called Mission Models and Money, focused on addressing gaps in the arts sector. The initiative critiqued the narrow focus on technical skills, advocating instead for a broader, more holistic approach to identifying what individuals bring to their roles.

Competencies refer to specific knowledge and abilities required for tasks, such as growing vegetables, fundraising, facilitation, or ecological expertise. These are seen as the technical or functional skills needed to perform effectively in various contexts.

Qualities emphasise deeper, personal traits, such as a "bigger than self" mindset and an awareness of being part of a broader community of life, not limited to humanity. These qualities encourage an ecological and interconnected perspective, fostering a sense of responsibility and alignment with larger, collective goals.

Attributes focus on interpersonal and sense-making abilities, like listening well and understanding human dynamics. These attributes are essential for fostering collaboration, empathy, and effective communication in complex, community-focused initiatives.

This framework suggests a multifaceted approach to finding or nurturing individuals who can contribute meaningfully to Bioregion Tayside's mission, integrating technical competencies, personal qualities, and human-centric attributes.

How do you assess the importance of the following competencies, qualities, and attributes for bioregioning and their existence in your current organising team as well as the wider bioregion?

## Competencies

Facilitation

Networking

Ecological literacy

Financial literacy

Political and legal acumen

Economic literacy

## Qualities

Systems thinking mindset

Innovation mindset

## Attributes

Cultural sensitivity

Deep and active listening

Collaborative leadership

Conflict mediation

Which ones would you add?

How do you know these are relevant ones?

**Commented [LS36]:** Would be worth making a list for Tayside specifically and get clearer on why certain CQAs are relevant and why others are not.

The list could then also function as a hiring guide for people employed in BFFs down the line.

How do these three inform practice for BT?

Potentially a scout role could help to improve recruitment efforts in bioregional organising teams: someone who goes out to community gatherings and town-hall meetings and spots the kind of people one would want to have apply for bioregioning roles. In addition to that, making a deal with people to want to and be supported in growing those skills as part of their job, recognising that hardly ever will someone hold all of them from the beginning.

**Commented [LS37]:** Potentially experiment with a "scout" role for people who need to be drawn into the BT work - whether as partners or team members.

Hiring someone from outside a bioregion is challenging because they often lack the nuanced understanding of the place's deep-rooted relationships, history, and social dynamics. These subtleties, often unspoken or unnoticed, are critical to integrating and operating effectively within the community. While an outsider may strive to belong, achieving a deep connection typically requires a significant amount of time or being originally from the area.

How does the current culture in the bioregion compare against the desired CQAs?

People in Scotland are very practical, go and do things, get on with it mentality. In combination with a no-nonsense approach.

The concept of re-inhabitation of the landscape / bioregion is critical to any team expansion efforts of BT.

Is it worth listing more comprehensively?

Difference between hiring and people in the bioregion?

The language around how you describe what you need people to do in this space needs to be very carefully calibrated not to sound woo woo, because there is a more anti woo woo feeling up in Scotland than there is in SW England.

What are the ones that can be learned / acquired and not?

Wondering what can be learned from H1 head hunters and their practices to identify the people with the right mix of "good foundation" and "areas for growth".

## 12. Bioregional Governance

### Institutions

Have you mapped the main institutions that hold governance and decision-making power at the moment?

Not a structured map yet. But would be worth exploring without losing ourselves in details. Starting points might exist in the work that was done with ETH Zurich, for example, despite being not very well presented.

There is a difference between relationship / actor mapping and mapping of power dynamics and who can make/influence which decisions.

There is a report/slide deck about what is wrong with current governance structures for the adaptive governance work in BT.

**Commented [LS38]:** Potential for a map that shows assets and then assesses change through different lenses (adaptation, governance, H1 finance, etc.)

**Commented [LS39]:** Need to be clear about where resource is best invested and who are the actual decision makers in the end.

How representative and diverse are these institutions?

Are there any institutions that begin to emerge as alternative governance powers?

Community Development Trusts might be one type of organisation that falls in this category, but in Tayside there are relationship difficulties with existing ones and their directorship. They are currently also too weak to be influential enough.

Bioregioning Tayside should be one of these.

There is a feeling that we're in a time of managed decline of existing governance structures (such as councils). They are never going to get any better because they depend on a tax base that is not going to be increased any time soon. That should make the transition to new ones easier as we're not bumping into very strong established structures.

SSE, Scottish Water and Forestry and Land Scotland are non-governmental organisations with massive influence on the landscape and community outcomes. However, they are large, national corporate structures that don't have local representation or embeddedness.

More broadly speaking, social media companies hold huge amounts of power and influence over people and their decision-making.

**Commented [LS40]:** Maybe there is a need for high integrity principles for corporates operating in a rural environment (similar to nature finance space right now).

### Decision-making

What is the role of ownership and property in decision-making?

Huge role. Especially when it comes to land ownership.

How are decisions being made for the "commons" of the bioregion?

There is a need for more work around the governance for the many & the commons vs. The governance and agency that people have on their piece of land that they have been living and working on for generations. Need to navigate conflict of interest.

**Commented [LS41]:** Worth looking into Elinor Ostroms principles for governing the commons.

Are those for whom decisions matter most included in the decision-making process?

What is the role of dialogue and deliberation in decision-making for the bioregion?

It's definitely a thing in Scotland and there have been examples of participatory budgeting happening in Tayside, for example. But there is not a lot of traction from the participation end yet, it's always the same people showing up. It's a lot of people work that needs to go into this.

**Commented [LS42]:** BT efforts are needed to create enough participation for BFFs to be able to have democratised governance structures. Potentially frame BT as an amateur.

Most orgs also don't really have the capacity to run enough workshop settings etc. to do the participatory part. Community Place Plans and 30x30 nature networks are one example of this lack of resources to mobilise people / participation for it.

Can urgent decisions be made in time?

### Accountability

Who or what are the most powerful stakeholders of the bioregion accountable to?

Do people have any incentive to work toward bioregional goals?

### Adaptive Governance

Where are you in the process?

What are the current hurdles?

Have the different nested levels of networks been defined yet?

Has a decision-making framework been established yet?

What is the role of healthy redundancy in your bioregional governance structure?

## 13. Bioregional Funding & Finance Landscape

### General

Would you say the work is adequately funded right now?

No, as stated and elaborated before.

How is the funding situation for project work vs. supporting/ enabling work respectively?

No real core or backbone funding for BT at this point. Mostly project-based.

What is the total amount roughly that flows into bioregional regeneration work in your bioregion?

BT projects:

- River Erich Catchment Restoration Initiative: 125k
- Feeding Tayside Through the Climate Crisis: 60k
- Communities Monitor Landscape Change: 17.5k
- Bioregional Governance & Finance: 30k

What funding streams have you explored so far?

Mostly grants (public and philanthropic) at this point.

Which ones are the most and least reliable / sustainable?

Grants are most reliable for now. Not very sustainable though.

Are you clear about how to communicate the value that you are generating through your work?

Still developing the approach to communicating the value generated through Bioregioning Tayside. Start to have some of the vocabulary around this. Recognising the need for a clear narrative and are working on creating a compelling case to attract funding and maintain confidence in nature finance markets. However, facing challenges in effectively articulating the complex, emergent nature of the work to people with a finance background but not strong ecological or system-oriented experience.

Some funders currently don't believe that there is actually a market for "bundled credits", which try to capture some more of the complexity of value creation that is happening in reality.

Are you clear about the total funding amount required across the efforts?

No precise figure yet. Acknowledging the need for quantification though.

How large is the group / ecosystem of people and institutions right now that support the bioregional regeneration work financially?

Very limited at this point.

Does your bioregional organisation act as a re-grantor or financial allocator right now?

Yes, to a small extent – within the project portfolio. 40k of Scottish Rural Network is re-granted to other people (MOUs with other orgs to do the work). For the RECRI project, BT is a fiscal sponsor.

Tayside Adaptation, 30x30 and Nature Scot's Scotland Investment Portfolio are further opportunities on the horizon to explore as a re-allocator.

Are there any dedicated financial instruments set up to support the work yet (funds, bonds, PES, etc.)?

Not yet.

Are there any dedicated financial institutions set up to support the work yet (bank, CDFI, trusts, etc.)?

Not yet. Perthshire Credit Union Tay Valley Credit Union might be potential partners.

What is the level of financial literacy of your team and people in the bioregion more widely?

Rather basic when it comes to the team. Not many, but some people with the required intellectual capital in the bioregion that could help build what is needed locally. (particularly in the universities, esp. St. Andrews). Also some private actors that might be interested in getting involved. Likely people will need help with thinking outside the box.

Have you done any analysis yet as to what would be needed or best suited in terms of instruments and institutions?

Not yet apart from the nature finance exploration as part of the RECRI.

**Commented [LS43]:** People in Scotland are desperately trying to make H1 work. BT seems to be one of the few organisations that tries to move toward H2. If we did an event, a lot of people would turn up, but they would still focus on H1. It seems there is a huge lack of imagination.

**Commented [LS44]:** What is a narrative that captures all the kinds of value that are being generated. Not just the technocratic view that current funders understand?

**Commented [LS45]:** I'm wondering, what role is there for other orgs (like Dark Matter Labs) to take funders/ philanthropy on a developmental journey?

**Commented [LS46]:** There is potential to grow this role of BT until another dedicated financial institution can take over.

**Commented [LS47]:** Could be worth exploring money supply backed by land value & NACs

**Commented [LS48]:** Would be worth building this alliance locally and have external experts as "challengers" for thinking outside the box elements.

## Public Funding

What sources are available from public institutions? Primarily grants from Nature Scot and Scottish Rural Network.

## Private Finance

Do you leverage small amounts from people who become part of the community and then bring in a lot larger tickets? Not yet.

Have you looked at the local economy and local value circulation as an option to resource the bioregional regeneration work (such as regenerative business models, bioregional tithing, crowdfunding, community investment notes, etc.)? Not structurally yet. People do understand crowdfunding and lots and lots of people are bartering around the bioregion regularly. But would probably require further investigation and structural formalisation for regeneration purposes.

Cooperative exists to buy and sell in bulk in the farming context. Plans exist to ask them to collaborate on carbon and bundled credits too (Bioregional Carbon Collective).

What part of the bioregional regeneration efforts is funded through market-based revenue? Nature finance markets are breaking in Scotland at the moment – can't let that happen if we want H1 to work.

Have you explored to leverage supply chain finance for your bioregional regeneration work? Not really.

## Alternative Streams

Have you looked at avoided risks as a source of funding? (Value-at-Risk) Not structurally yet.

Have you looked at any more innovative funding mechanisms yet (such as Web3-based approaches, etc.)? Not really.

## Ecosystem

Have you started looking at bringing multiple capital providers together in an ecosystem? Not yet. Mostly due to capacity constraints and there are not many organisations out there. Also networks and connections are an issue.

**Commented [LS49]:** Requires a dedicated role who can build these relationships.

Are there any relationships between your various funders? Not due to BT.

## 14. Bioregional Communication

Why are you communicating about your work, if so?

Want and need other people involved, understand the work, and be part of the action against the polycrisis as quickly as possible. Land managers and other people in the bioregion. Help elevate work in a bioregional way (showing other people where they are).

Connecting people is fundamental to bioregioning work. Communication is a way of connecting people and making people visible in the landscape where lots of people are working independently without considering their interconnectedness.

Have to affect a shift in consciousness to succeed with the work.

Would you say the communication is tailored to the bioregion?

Are you clear on your target audiences when communicating?

No clear strategy yet.

Try to have focus on elevating community leaders' work rather than policy folk or farmers union.

Land owners are one of the most difficult groups and the only thing that seems to change them/their motivation is policy and regulation.

There is a clear difference between people of different age groups and how open they are for new ideas. Worth being targeted in this regard.

**Commented [LS50]:** It could be worth formulating a clever comms strategy in order to make best use of scarce resources.

**Commented [LS51]:** Points to being much clearer about why targeting certain people and when, in order to utilise available resources in the most effective ways.

**Commented [LS52R51]:** This is a question about which levers of change BT can best address and when

Have you identified different styles and languages you need to use in your communication to speak to different groups?

We don't have a strategy around comms or styles – very much ad hoc so far. Eventually it will need to be educational (a lot of people don't understand ecology for example), invitational (needs call to action), and inspirational / promotional (elevating those that are already working on this and showing them, they are part of a bigger movement, giving them power).

Good bioregional communication will need to be rooted in a systems understanding of things and acknowledge the complexity and yet be simple enough for people to understand it and resonate with it.

Do you choose your channels of communications intentionally?

No formal strategy yet.

BlueSky account has 2.5k followers but BT yet to utilise beyond relevant postings

Does the communication have clear calls to action to drive engagement?

Needs more of them.

Do you work with media outlets, partners or influencers to amplify your voice?

Not yet anything formal.

Do you aim to create accountability and trust through regular communication? No need to replace trust with verification.

Not considered the distinction between trust and verification-based comms enough yet.

The team would always prefer to communicate to build trust. Communicating to verify is described as something like a nasty medicine someone has to take.

Inviting funders and other people to the bioregion might be a good way to do "embodied verification" rather than extensive reports.

Easy to measure KPIs like social media followers or number of people participating in community science projects would help too to lower reporting burden.

**Commented [LS53]:** Leon said: "What I'm seeing in the conversations that I'm part of is that the money that is going to move first, and in the quantum that we need, is likely not going to be money that is issued based on verification of impact, but is actually money based on deep interpersonal trust. And I think what is really interesting here is the role of communication in both because you can communicate to verify something and you can communicate to build trust about things happening, and I would assume that the style of communication and the way you do it is slightly different, but in both, the role of communication is very important."

What is the role and state of storytelling in your bioregioning work?

Not using arts and culture and heritage enough yet. But want to do more (e.g. field guide, Parliament of Waters, etc.). Want to be careful about raising expectations in the arts sector though as many artists are psychologically in a precarious place in Scotland at the moment.

As always, this is also an issue of money and resource.

People innately know the power of arts and culture.

Do you measure the effectiveness of your communication?

Are you aware of the n-th order effects of your communication? Are you increasing the possibility for action beyond your spheres of control or even oversight?

There are lots of people that start to realise that something needs to change but they don't quite know what to do. So communicating about bioregioning work gives them something to hang on to and feel inspired to take action within their sphere of influence – without BT necessarily even knowing or being involved.



What was the greatest success to date based on your communication?

The conference was the most successful live event. The websites (BT and RECRI) get lots of good feedback and traction.

## 15. Planetary Embeddedness

### Partnerships

Do you have bilateral partnerships with other bioregional organising teams?

Good conversation with Findhorn bioregion more recently.

Also strong relationships and conversations with Bioregional Learning Centre in South Devon.

There was an intention to collaborate more closely with Trees For Life when Marian left them which, for various reasons, did not happen.

Made lots of good new 1-to-1 relationships through the nature finance world, recognising that they have the re-engineer the plane while flying it.

Do you work with bordering bioregioning teams to ensure landscape-level integration and connectivity?

No noteworthy ones active. The only people that come remotely close to that, but not don't define themselves as a bioregion, is Cairngorms National Park Authority (good relationship).

Which national networks are you part of?

The UK Bioregional Community of Practice but stepped away from it a bit.

Which international networks are you part of?

The Collaborative for Bioregional Action Learning & Transformation (COBALT) network.

Team perceived their participation in their 2020 Learning Journey it as enormously useful and beneficial to have those cross landscape conversation, because it's not just about replicating ideas or ways of working, but it's about understanding what ideas can be transposed to your own place and work in a similar but different way, but it also completely opens your mind to the differences that there can be between places and the differences that are underlined by underpinned by the geology and The biodiversity of a place and the climate. It's useful to have that knowledge of the differences as well as the similarities and the similar ways of working. It counters nationalism and shows that bioregioning is a way of understanding and celebrating diversity of all sorts of human and biological and climatological and geological ways. It's a way of just understanding more of it and celebrating it, as opposed to getting completely insular about your own place.

Very interested in exploring how clusters of bioregions can start to question the nation state.

Are you deliberate about your choice of which networks to join?

Yes, very much so. Constantly assessing "what is a good use of our time and resource?"

There is an acknowledgement too that some upfront investment is needed most of the times to really assess whether the cost-benefit analysis of joining a new network is positive.

**Commented [LS54]:** Worth linking into the pan-European bioregional congress and events planned for 2025 and 2026.

**Commented [LS5R54]:** Possibly plan for something in Tayside for 2025?

### Networking

What are the costs and benefits of being embedded in cross-bioregional networks from your experience?

Time is the biggest cost.

Benefits are exposure and sharing of the work and world view, especially with more adjacent movements/groups such as farmer networks.

But bioregional understanding is also shaped through exchange with other bioregional teams – not forcing a unified understanding of what bioregioning means or what it looks like in practice. But just to expand the horizon about how others are thinking about it.

### Exchange

How well do you think you share your learning with the wider community?

Primarily through 1-to-1 conversations and some communities.

Do you have reciprocal financial relationships or agreements with other bioregioning teams? If so, of what kind?

No financial relationships with other bioregions. Could be an interesting idea to reach "economies of scale" once BT has a viable foundation itself – which is the primary concern right now.

How does the bioregion demonstrate solidarity with other regions, especially those facing ecological or social crises?

Not in a financial way. But through other ways of gifting time, information, etc.

## Appendix

This is an overview and explanation of all the 15 elements that the stocktake checks for.

- 1. Bioregional Organising Team** *A collaborative group of stakeholders dedicated to catalysing regenerative development within a specific bioregion. This team brings together diverse expertise, including local community leaders, ecologists, financial innovators, and policymakers, to co-create place-based solutions that address systemic challenges in the regenerative transition. The team is ideally deeply embedded in local communities and part of the local tapestry of social connections. It connects people, projects, and places in synergistic and purposeful ways.*
- 2. Operating Model & Theory of Change** *The way in which the organising team operates their work, e.g. through an established or bespoke institution, as well as the broader theory of change and approach to learning that this organisation operates through. This element also looks at the way in which the organisation cooperates with other institutions active in the bioregion.*
- 3. Bioregional Stakeholder & Relationship Mapping** *A mapping of key stakeholders and their relationships as well as motivations, potential pains & gains, and power or influence.*
- 4. Multi-Stakeholder Engagement Process** *The process that is used to mobilise and organise various bioregional stakeholders to build coherence rather than fragmentation and conflict with regards to the future trajectory of the bioregion.*
- 5. Bioregional Assets & Liabilities** *A combination of participatory processes and data-driven analyses that map biophysical, social, and economic systems; assets and opportunities; and risks, liabilities, needs, or challenges in the bioregion. This will include stocks and flows of bioregional value across social, environmental, and economic domains.*
- 6. Project Portfolios & Synergies** *The past, present, and future portfolio(s) of projects, programmes, businesses, initiatives, and alike that together aim to achieve the regeneration of the bioregion. Ideally, these portfolios synergistically bundle interventions to leverage spill-over and combinatorial effects.*
- 7. Bioregional Visioning** *A collective and participatory process that helps bioregional stakeholders align on and coordinate around a shared vision for the future of the bioregion.*
- 8. Bioregional Regeneration Strategy Document** *A detailed plan and set of processes for how a given bioregion will be regenerated over time, including a guide to the worldviews, values, and principles recommended in approaching the work. The strategy is built on a baseline assessment of the current state, including existing regenerative projects and organisations, a comprehensive mapping of key opportunities and threats facing the bioregion, and a systemic analysis of the priority transition areas. The strategy is informed by the history and essence of the place and could span 20-100+ years (or multiple generations) into the future. It serves as the basis for ongoing adaptive management in the region as well as resource allocation, and is itself updated as conditions warrant.*
- 9. Bioregional Hub Function** *A community-led institution that functions as a gathering place (physical and/or virtual), resource centre, and facilitator of various regeneration-related activities, initiatives, and networks within a bioregion. They can offer educational and capacity building programs, much like Bioregional Learning Centers do, while facilitating the flow of multiple forms of capital (intellectual, social, cultural, etc.).*
- 10. Bioregional Health Metrics and Indicator Frameworks** *A framework of metrics, indicators, and goals that measure bioregional health holistically and capture the dynamic, non-linear, and complex nature of bioregional change.*
- 11. Bioregioning Competencies, Qualities & Attributes** *Specific competencies, qualities, and attributes that are needed in people who want to engage in bioregioning work. This element speaks to the inner development and state of the people engaged in the work.*
- 12. Bioregional Governance** *The ways in which decisions are made about key questions concerning the bioregion, including resource allocation and key interventions as well as accountability chains and structures that shape actions across the bioregion.*
- 13. Bioregional Funding & Financing Landscape** *The stocks and flows and types of financial capital that the bioregion and its project portfolio(s) benefit from. This element also checks for purpose-built institutions or instruments that could function as catalysts or first iterations of Bioregional Financing Facilities.*
- 14. Bioregional Communication** *The ways in which the bioregional organising team communicates about their work. The key target audiences, channels, and narratives it employs to elevate the mission and mobilise more stakeholders to join.*
- 15. Planetary Embeddedness** *The ways in which the efforts in a particular bioregion are embedded in networks and relationships within the larger bioregional movement around the world.*