Tayside Bioregional Finance & Governance

Stocktake and Gap Analysis

Introduction

This report is the result of ten in-depth conversations between Clare Cooper, Marian Bruce, two of the Directors of Bioregioning Tayside and Leon Seefeld of Dark Matter Labs (Dm), exploring 15 key elements related to bioregional organising.
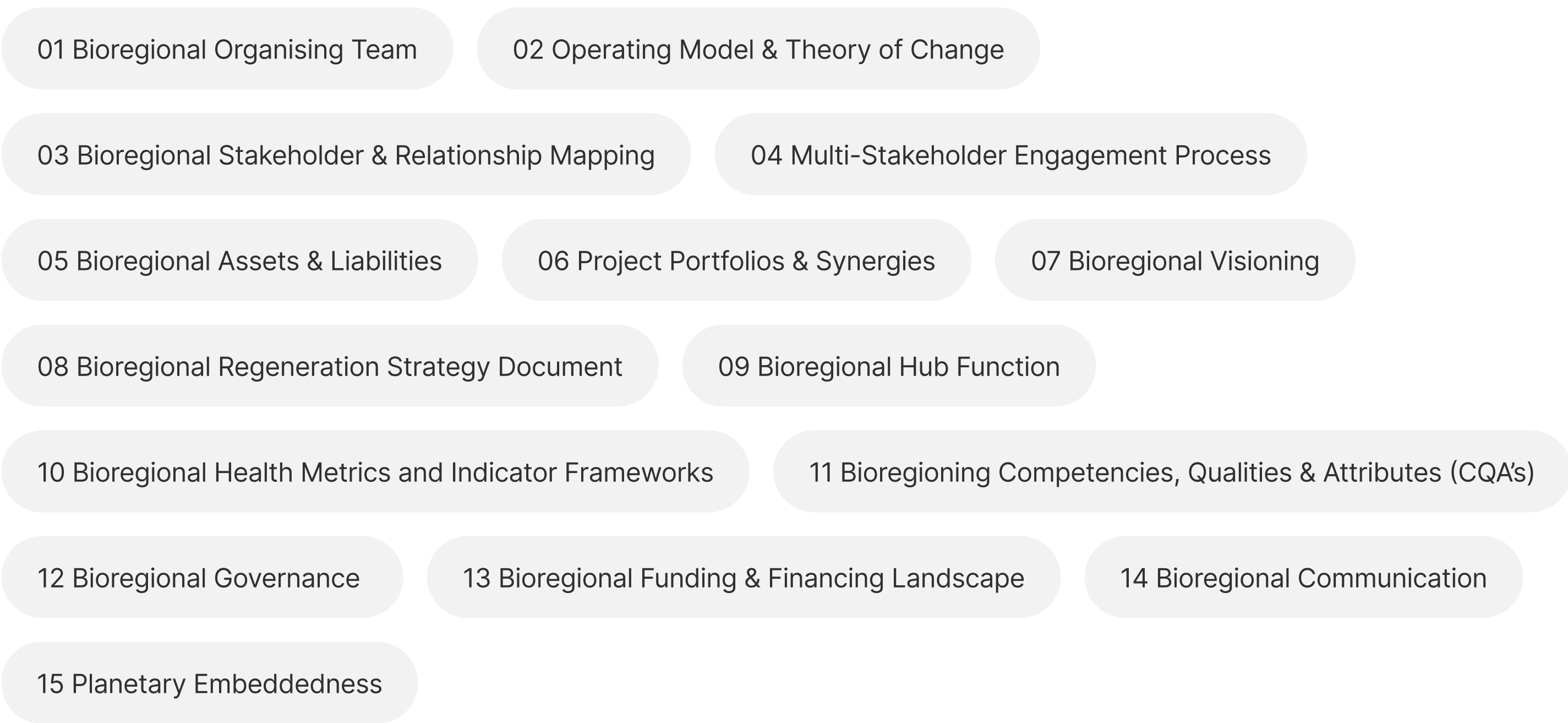
01 Bioregional Organising Team

02 Operating Model & Theory of Change

03 Bioregional Stakeholder & Relationship Mapping

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Figure 1. The Tay, *Wikimedia Commons*.

The aim of these discussions was **to assess the significant progress 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 the next 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 key observations, overarching reflections, and potential next steps for Bioregioning Tayside. These insights supported a subsequent prioritisation exercise, which helped to determine which gaps must be addressed to prepare for meaningful discussions about Bioregional Financing Facilities.

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 and the full report aim to highlight the breadth of potential questions and inspire other teams to adapt and conduct their own process. We obviously welcome enquiries anyone who wants to learn more about the process that we ran or is curious to learn more about the content of the discussions.
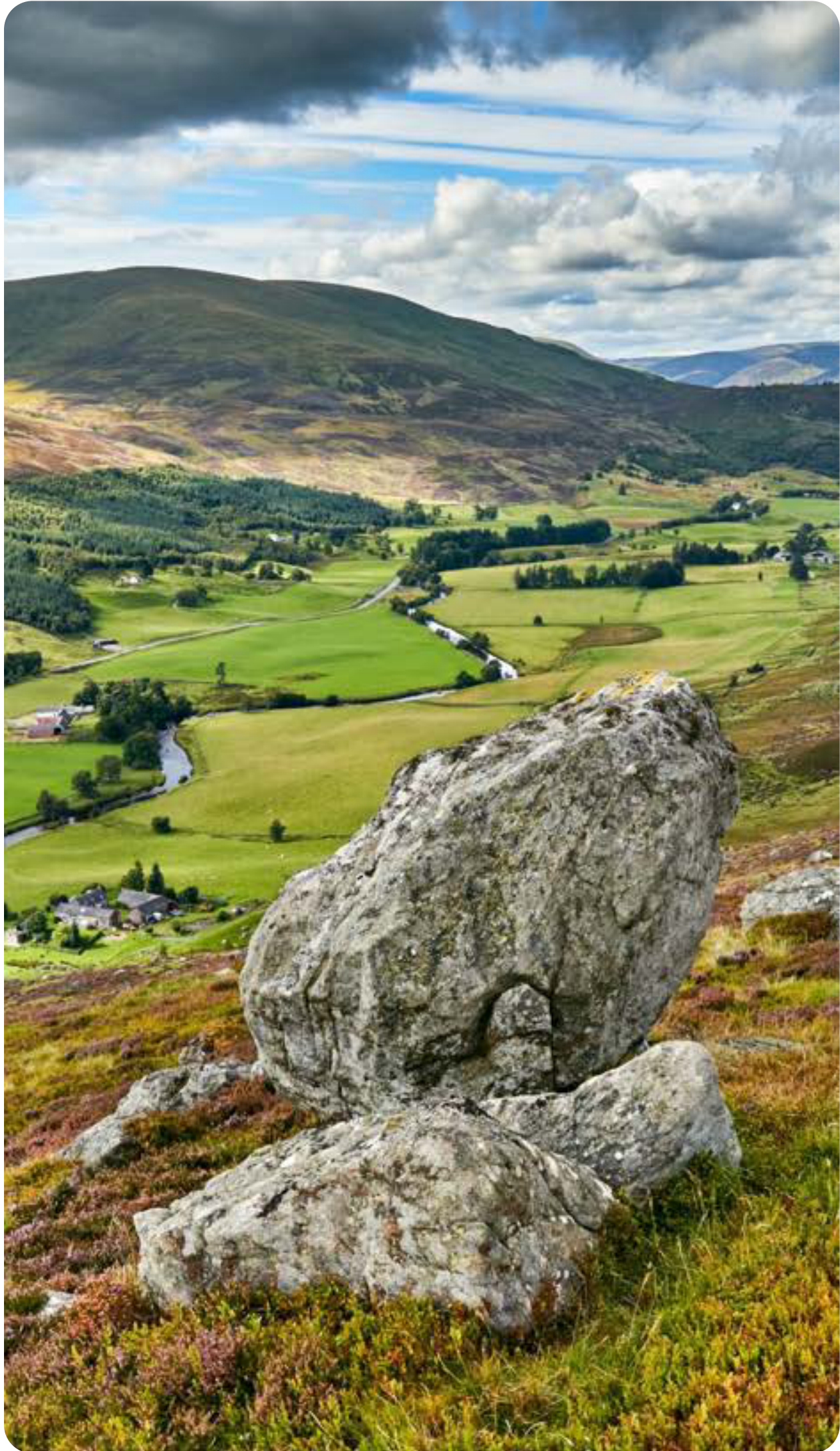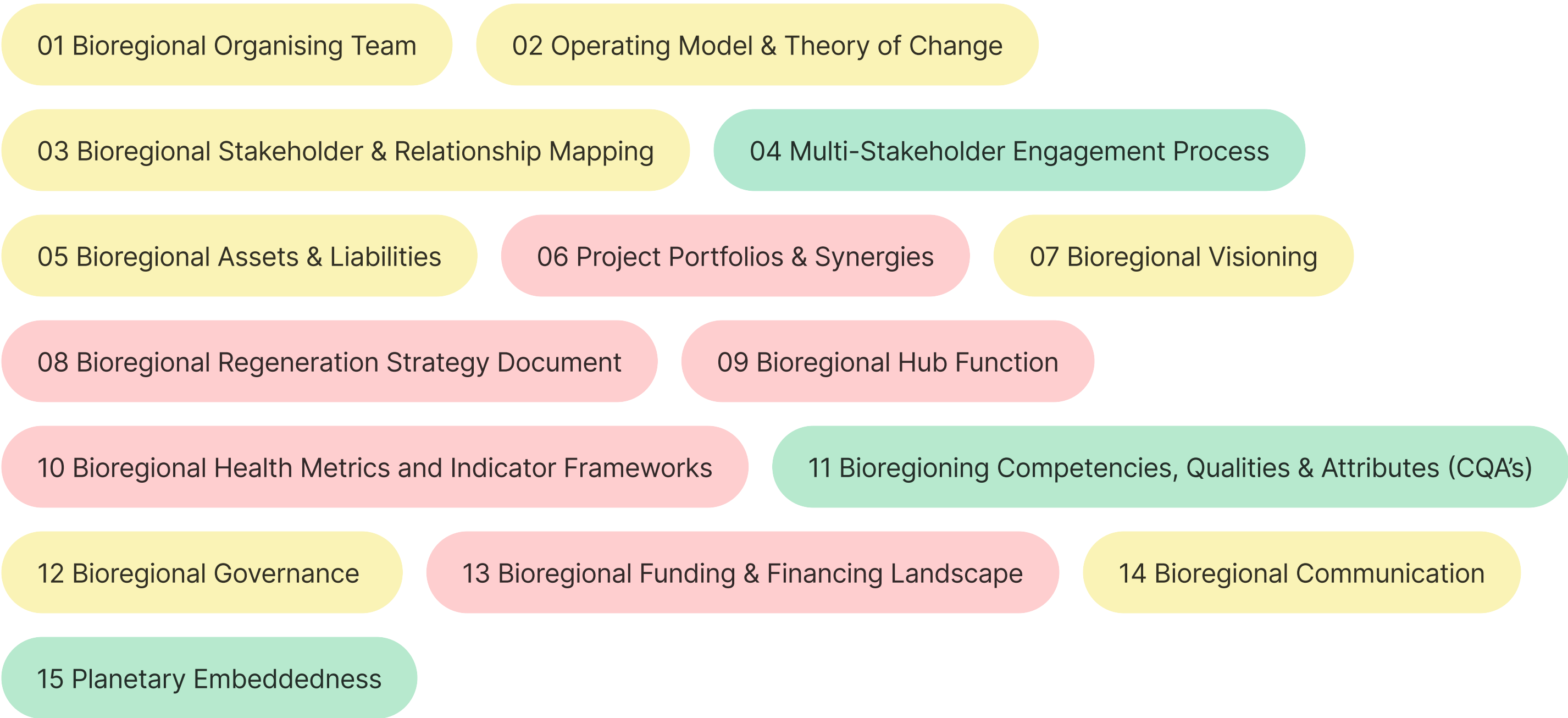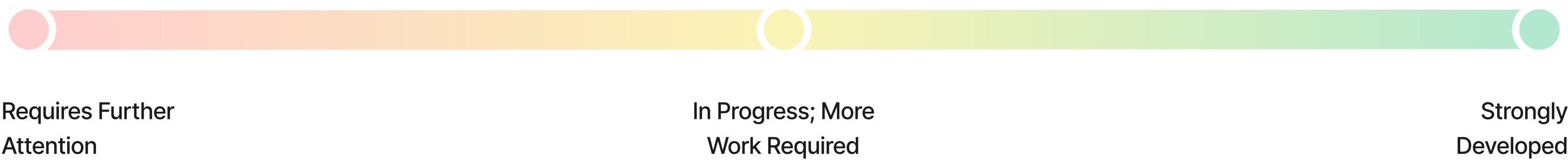

Figures 2-4. (Clockwise) Glenshee, *George Logan*; Tay Estuary, *Markus Stitz;* Keillor Symbol Stone, Strathmore, *Clare Cooper.*

Elements Assessed

Overview: Elements Assessed

Requires Further Attention — In Progress; More Work Required — Strongly Developed

For more detailed descriptions of the 15 elements, see slide 35.

Figure 5. Lapwing eggs, *Aylwin Pillai*.

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1   Bioregional Organising Team

The core team is still small and rooted in shared friendship, passion, care for the natural world and 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 permits, 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.

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

- What role do you see your organisation play in the Tayside bioregion?

- What role do others see your organisation play?

- Are there other organisations that play a similar role?

- How clearly defined is your organisation's vision, mission, and Theory of Change?

- Do you organise your work in strategic pillars?

- Do you derive strategy deliberately or emergently?

- How does your org crystalise and use learnings?

- How do you translate learnings into new action?

- Do you collaborate with organisations locally?

Figures 6-9. (Clockwise) Highland Boundary Bitters, *Highland Boundary*; Tay Estuary, *Markus Stitz*; Strawberry's growing in Strathmore, *Markus Stitz*; Wheat growing on Strathmore, *Clare Cooper*.

Stakeholders have been mapped for different purposes — there is not one universal, all encompassing map. The qualitative side of maps (dependencies, motivations, pains and 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.

- Was a structured stakeholder mapping done?

- 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?

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

- Have you mapped the relationships and dependencies among stakeholders?

- Have you mapped challenges and conflict?

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

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

- What is the role of the different stakeholder groups (see Bioregional Financing Facilities, p. 51) in your bioregion?

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.

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

- What has the bioregional engagement process looked like so far?

- How do you build trust among stakeholders?

- Did you follow any specific methodology?

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

- What is the felt sense of responsibility of citizens/business/public sector for the bioregion?

- What is the overall changemaker density of the bioregion?

Figures 10 & 11. Lighting the New Year Beacon on Alyth Hill, *Clare Cooper*

5   Bioregional Assets & Liabilities

A formal mapping of assets has not yet been done by BT but they are implicitly known by the team. Other organisations have mapped some 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 orchestrated by BT 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.

- What projects existed in the past?
- What projects are currently live in the bioregion?
- Is there a dashboard that indicates all live projects and their progress?
- Do you communicate about projects openly enough so that people can get engaged?
- What scaling strategies have been employed so far?
- Have you mapped business cases that exist in the bioregion?
- Have interlinkages of projects and possibilities for combinatorial effects been mapped so far?
- Have leverage points been mapped?
- Do you have a space where you capture project ideas that you cannot implement right now but might be able to in the future?

Figure 12. Confluence of the River Ericht and River islands, *Markus Stitz*.

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 Ceilidhs 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 and the Tay Bioregion as a whole, especially for the funding and financing community and the design of a BFF.

EXAMPLE QUESTIONS

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

- 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?

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

Figure 13. Scottish Country Dancing, *Clare Cooper*.

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 co-ordination.

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 Ericht 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.

10 Bioregional Health Metrics and Indicator Frameworks

- How are you thinking about MRV at the moment?

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

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

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

- Are the indicators to track progress collaboratively designed?

- Do you think there is merit in having indicators that are universally used across bioregions? Or do these need to be context specific?
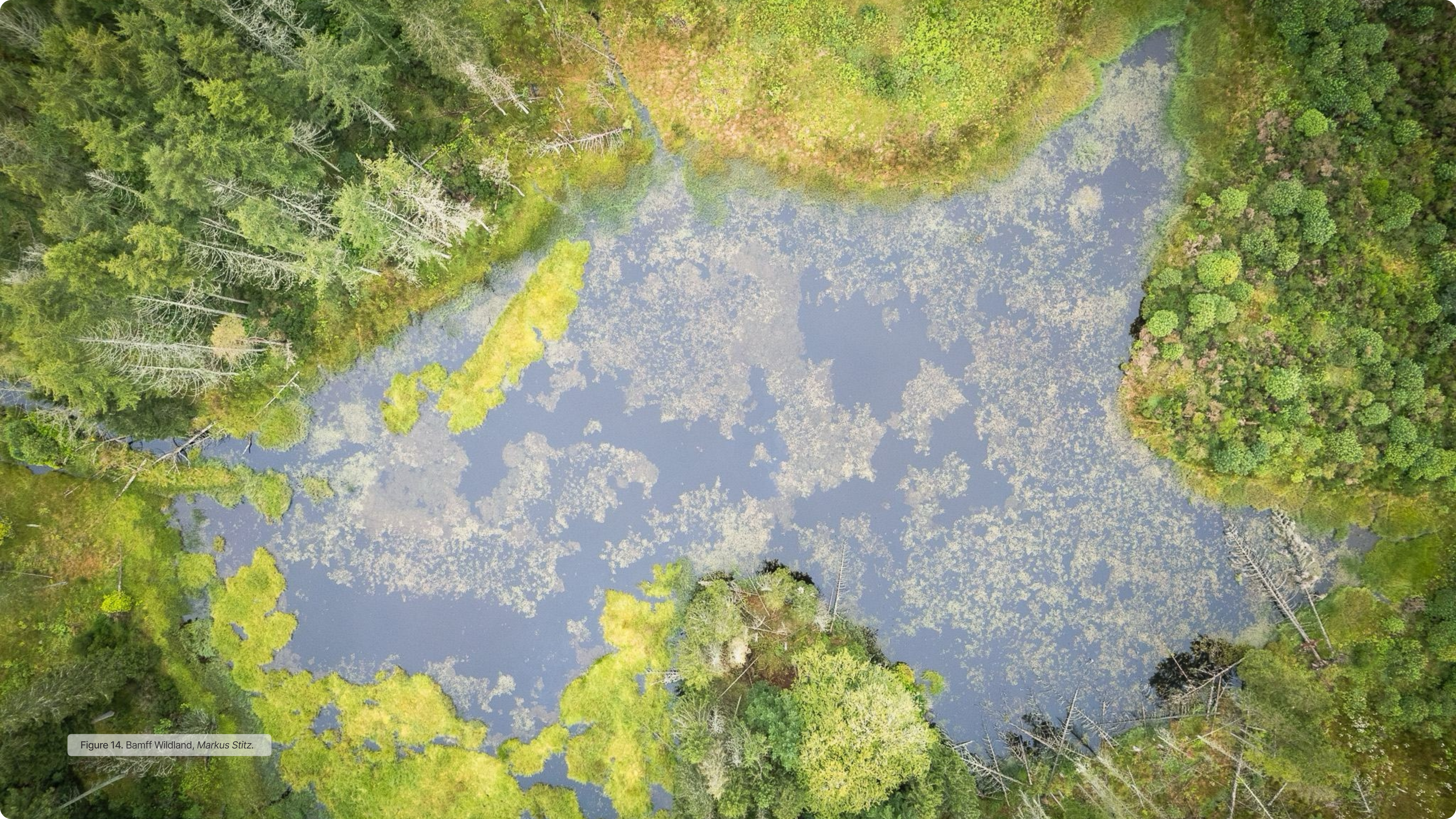
A bioregion-wide health measurement is missing at this point.

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.

Figure 14. Bamff Wildland, *Markus Stitz*.

11 Bioregioning Competencies, Qualities & Attributes (CQA's)

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.

- 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

- self managing
- self reflective
- co-operative
- collaborative
- critical thinker
- adaptive
- inventive
- systems thinker
- articulate
- capable of managing uncertainty and not knowing at very high levels
- resourceful

Qualities

- self improving
- self reliant
- co-creational
- persevering
- interculturally aware
- ethical
- courageous
- "seeing with new eyes"

Attributes

- relational
- empathetic
- initiating
- catalysing
- reflective
- kincentric
- pro-active "What If"

- Which others would you add for your speciific context?

- How does the current culture in the bioregion

12   Bioregional Governance

Currently, BT is the only organisation actively involved in introducing bioregional framing to governance in Tayside – essentially governance that strives for sustainability and a balanced relationship between humans and nature by combining ecosystem-based decision making with community participation and self-determination, decentralised and place-based governance and regenerative economics.

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 budgeting at a regional level recently, led by Local Authorities, but with small numbers of citizen participation so far.

Figure 15. Young People's fire making workshop, *Clare Cooper*.

13 Bioregional Funding & Financing Landscape

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 Bioregional financial 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.

Figure 16-19. Fungi and Lichens on Strathmore, *Clare Cooper*.

14　Bioregional Communication

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.

4 Planetary Embeddedness

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 or in small groups with trusted contacts.

- Do you have bilateral partnerships with other bioregional organising teams?

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

- Which national and international networks are you part of?

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

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

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

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

Figures 16. Curlew chick and pony, *Aylwin Pillai*.

Outlook + Plan for 2025

The impressive amount of work done in Tayside over a short period constitutes an important foundation to any next steps and further developments.

Key gaps that have been identified as important to address next are listed in this section.

In collaboration with Dm and other partners, the team of Bioregioning Tayside has committed to addressing these gaps over the course of 2025 and aims to work towards designing and implementing BFFs later in 2025.

Evolution of BT as the key organising institution in the Tay Bioregion

× Refine and crystallise values & world views

× Clearly articulate different facets of BT's value proposition

× Develop a complexity-aligned ToC

× Define strategic pillars to cluster intervention areas

× Strategically expand the team to cover more Competencies, Qualities and Attributes

GAP 02

Bioregion-wide efforts

× Co-create a Bioregional Regeneration Strategy Document

× Enrich and update stakeholder & relationship mapping

× Increase deliberate visioning with multiple stakeholders

× Mature a bioregional governance

× Structure and crystallise a partnership structure

× Develop holistic Health Metrics & MRV process

× Engage in bioregional risk mapping

Projects

× Visualise project portfolio and set up multi-use database

× Define allocation portfolios based on systems mapping and
   strategic leverage points, aiming for synergies and
   combinatorial effects

× Improve documentation per project and innovate according
   to landscape needs

BFF Preparation

× Illustrate Tay-specific problem space for bioregional financing

× Sketch contours of a solution landscape across 3 Horizons

× Build a menu of allocation options

× Map potential capital sources

× Construct an alliance of individuals and financial institutions by building interest and demand both local and non-local

× Implement pilot by manifesting 3-4 of the identified solution pockets

Appendix

Detailed Descriptions
of 15 Elements

01 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.
02 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.
03 Bioregional Stakeholder & Relationship Mapping	A mapping of key stakeholders and their relationships as well as motivations, potential pains & gains, and power or influence.
04 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.
05 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.
06 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.
07 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.

08 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.
09 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.