Climate Adaptation in South Devon

Towards a joined-up strategy linking local communities across the South Hams and the wider region

A DISCUSSION PAPER October 2024



THE BIOREGIONAL LEARNING CENTRE Climate change adaptation means altering our behaviour, systems, and—in some cases—ways of life to protect our families, our economies, and the environment in which we live from the impacts of climate change. (WWF)

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Summary and introduction

Exploration of potential actions to restore saltmarshes on the river Dart (BLC project). Photo: E. Gleave

Discussion paper summary

We often speak about climate change as if it is the end of the story. In fact, adapting to it opens us up to a future that we have the ability to plan for today. By understanding the likely impacts and risks, we can take the strongest actions now. This discussion paper is not about the major infrastructure upgrades that will be needed from roads and transport to energy and water. It explores the role of citizens and how they can work more closely with policy makers to prepare for the Long Emergency.

The Bioregional Learning Centre has committed the next 18 months to taking a lead role in moving South Devon towards climate adaptation. This discussion paper outlines ways in which we can work in partnership with South Hams District Council, Sustainable South Hams, Devon Communities Together and others. It builds on the outcomes of the Learning Journey for Climate Adaptation that we led from 3rd to 7th June 2024.

During that week we gathered evidence of how farmers, communities, town councils and others are already adapting, and what is needed to grow future resilience. Our visits covered regenerative agriculture and horticulture, renewable energy, community collaboration, health and social care, biodiversity, flood prevention and response, food availability, and innovative research.

Climate adaptation can't take place in isolation. Whilst this report has been prepared for the South Hams administrative area the proposals need to be adopted across the wider region and include West Devon and Dartmoor. While climate mitigation (reducing carbon) is typically about infrastructure projects at all scales, adaptation requires us to think in wholes: whole rivers, whole catchments, whole landscapes, whole systems. And put in place a joined-up strategy that leads to action.

BLC's primary recommendation is the development of a robust joined-up local adaptation strategy and adaptation network across South Devon. The needs we have identified are: countering climate risk through supported risk taking (e.g. for farmers to move from conventional into regenerative farming); facilitating the unlocking of knotty and systemic multi-stakeholder issues where the community needs help in moving forward (e.g. the Slapton Line road); establishing an online knowledge network for mutual exchange of information, learning, resources and support; promoting regenerative tourism that boosts local livelihoods and does not deplete our resources; more community-generated revenue allocated to community adaptation projects; and a single online portal to access a range of funding pots, in which a consortium of funders participate.

The development of a strategic communications plan and Adaptation Communications Programme in support of this work will be vital to its success. This would be achieved through a collective of design talent; leaders in design and media within the community who have a deep understanding of local audiences, reach, messsaging, dynamics and resources. SHDC provides support to the emergency services during major emergencies, as well as information and advice to residents and businesses before, during and after an emergency. In a Long Emergency, however, there is a need for clear and coordinated communications beyond emergency scenarios.

South Devon currently has a window of opportunity to consider how we will move forward under the likely outcomes of climate change. Many organisations, communities, projects and local government bodies are already taking steps towards this, but we are not yet adequately prepared for the future. The 2023 adaptation policy paper published by HM Government¹ indicates that in 2025 we will see the fourth round of reporting powers put in place by Westminster and local councils will be obliged to report on adaptation measures.

We recommend that during this autumn we take this discussion into the planning phase with SHDC and others, with the likely requirement for reporting adaptation measures in 2025 planned for now and a co-ordinated, funded and comprehensive Climate Adaptation Strategy adopted and implemented in 2025. This accords with SHDCs own ambitions set out in its <u>2024-2028 Council Plan</u>: *Climate and Biodiversity Primary Aim 3: To form an adaption plan for the South Hams so there is a pathway to deal with the consequences of climate change*.

Pathways for Action

Citizens

Robust joined-up local adaptation strategy and adaptation network	 Engage in the development of a Climate Adaptation Strategy for South Devon, and the convening of an advisory/stakeholder panel as well as a citizens forum. Parish and Town Councils draw down local funds to invest in local action such as hiring a lengthsman 	 Engage in the development of a Climate Adaptation Strategy for South Devon, and the convening an advisory/stakeholder panel as well as a citizens forum. Identify specific actions to incorporate adaptation into SHDC policy. Engage in round tables for town councils to share knowledge - starting with Kings- bridge Town Council sharing information on flood risk management Support local action: Funding, training and insurance Intervene in knotty issues such as retreat from the sea at Torcross/Slapton where it is proving hard for any one agency to take responsibility for the community's future.
Countering climate risk through supported risk taking	 Farmers consider how a Farming for Nature-model might work in the region and take up mentoring roles, supported by a shift in local perception towards farmers being forerunners of adaptation Take on adaptation tasks, supported by local authorities, for example community pothole mending with funding, training, insurance and equipment from local councils and the DCC Devon Road Warden Scheme 	 Visit local farms along with national policymakers (e.g. Defra) to consider options for financial support and alleviating risk for farmers leading the way in adaptive and regenerative agriculture Consider possibilities of an agricultural funding model similar to the Farming for Nature programme in Ireland Promote Devon County Council's Devon Road Warden Scheme more widely
Mutual learning, livelihoods and support	• Share knowledge and co-operate between town & parish councils, community groups, and businesses, within communities and across the region	• Look at opportunities for creating co-op- eratives across South Devon for different industry or charity groups, sharing the tasks of accounting, fundraising etc.
Regenerative Tourism: boosting local livelihoods	• Engage in a round table to explore possibili- ties for a new kind of tourism that showcases regenerative farming, ecosystem restoration, and local eco-friendly businesses, shops and restaurants	• Engage in a round table to explore pos- sibilities for a new kind of tourism that showcases regenerative farming, ecosys- tem restoration, and local eco-friendly businesses, shops and restaurants
Community- generated revenue and grants allocated to adaptation projects	• Support, create and develop revenue-gen- erating projects, such as community energy societies for wind and solar power, and con- sider how best to use revenue for adaptation within the community	• Create a significant online presence for this work, starting with consolidating and promoting all the possible funds avail- able for community groups in the field of climate adaptation

Policymakers

¹ The Climate Adaptation Reporting Power (ARP) is starting its 4th round. This is linked to the National Adaptation Programmes and UK Climate Change Risk Assessment. The Climate Change Committee recommended local authorities are brought into the ARP pilot in its 2023 Adaptation Progress Report and the government said it would trial this in its response: <u>Government response to the Climate Change Committee 2023 report to</u> Parliament – progress in adapting to climate change - GOV.UK (www.gov.uk)

Rewilding brought into focus at Apricot Centre. Photo: B. Kennerley

Introduction

Adapting to climate change, as well as reducing carbon emissions (mitigation), is an imperative that we ignore at our peril. This discussion paper sets out ways in which our region can face risk, plan ahead and develop a coherent, joined-up strategy with policy-makers and citizens working together.

Against a background of significant existing information, further evidence was collected during the Learning Journey for Climate Adaptation, led by the Bioregional Learning Centre (BLC), 3rd - 7th June 2024. The aim was to establish the current situation and opportunities at the local level.

The 25 participants, 29 people we met, and the BLC team all contributed towards this Paper's recommendations for policy change and ways in which communities can take action.

The purpose of this Learning Journey was to see first-hand:

How climate change is already having an impact in South Devon.

How farmers, NGOs, public servants and communities are taking action.

What kinds of policy change would enable more action, better planning ahead and greater collaboration between citizens, statutory bodies, public companies, NGOs, businesses, academics and policy-makers to meet the risks head on.

The invitation to participate was directed at councillors from South Hams District Council and individuals from community climate and nature groups.

We based our analysis of the local impacts of climate change on the climate science contained in the latest <u>IPCC</u> reports; the work on both climate <u>Tipping Points</u> and <u>positive social Tipping Points</u> from the Global Systems Institute at Exeter University; and The <u>Adaptation</u> <u>Strategy</u> for Devon, Cornwall and Isles of Scilly (DCIoS), the final version of which was published in October 2023.

The 2008 Climate Change Act legally commits the UK government to reaching net zero (greenhouse gas emissions reduced by at least 100% of 1990 levels) by 2050. At a regional level, several frameworks and policies create a strong expectation for change. These include the National Planning Policy Framework, the Flood and Water Management Act 2010, and the Environment Act 2021, as well as guidance from Defra and the Local Government Association.

There is a hierarchy of existing documents and reports that set context for this updated Climate Adaptation work:

- The overarching Devon, Cornwall and Isles of Scilly Climate <u>Adaptation Strategy</u> 2023-2027
- The Devon <u>Carbon Reduction Plan</u>, released on the 27th September 2022 by the Devon Climate Emergency Response Group (<u>DCERG</u>).

The DCIoS Adaptation Strategy is a good analysis of the likely scenarios for our region that are driven by climate change but as yet local District Councils have not been asked to make a commitment. This Discussion Paper is a step towards bringing the DCIoS Strategy down to a regional scale - taking advantage of SHDC's own commitment to produce a district-scale adaptation plan.

The work has been funded by South Hams District Council (SHDC), which declared a Climate and Biodiversity Emergency on 25th July 2019. A Working Group was set up that reported to the Climate Change portfolio holder, with the aim of helping the Council area reach net zero by 2050. The Bioregional Learning Centre has been working for climate resilience in South Devon since 2017. Our mission is to create the conditions for a learning region that is skilling people up so that our communities, systems and landscapes can thrive in the midst of change. BLC is part of national and international communities of practice that are exploring the most realistic and generative responses to climate change.





Climate change in the South Hams

Our water infrastructure copes with a lot... and more than water. Photo: J. Brady

Climate change will impact every community in South Devon, as it will across the world. By anticipating these impacts and preparing our response now, we can choose how we want to move forward instead of only being forced into emergency action.

River and surface water flooding

Sea level rise (coastal flooding and erosion)

Reduced water availability (drought conditions)

Temperature change and extreme heat/cold

Cascading impacts

2. Challenges and opportunities

Climate change is both a disruptor and an opportunity. Three central pillars of the South Devon economy-tourism, farming and healthcare-are already being challenged. Unpredictable weather can turn away tourists and impact crop planting and success. Health and social care, weakened by a lack of funding and affordable homes for workers, is further threatened by climate change effects such as increasing damp housing, high temperatures, and increasing mental illness.

Opportunities lie in our strong foundations:

- Resourcefulness of local communities in responding to emergencies [see p.X below].
- Experimentation and knowledge sharing going on, especially in farming.
- Expertise in the local universities, in particular Exeter University's Global Systems Institute.
- Opportunities for new livelihoods in, for example, clean energy, and the current political climate that is open to new ways of solving problems.

We currently find ourselves in a 'magic window' of around four years during which we can put in place soft infrastructure in the form of data gathering, societal-wide learning, funding for taking risks and innovating, and a regional strategy with citizens fully involved in its governance. The DCIoS research names five impact themes as being the most severe for South Devon. In no particular order these are:

River and surface water flooding

Climate change is projected to increase winter rainfall and increase the intensity and frequency of storm events, furthering the region's vulnerability. In Devon and Cornwall there are many communities located at the bottom of steeply sided valleys and/or near river channels. As a result, these communities are at high risk of rapid onset flooding following heavy rainfall.

Sea level rise (coastal flooding and erosion)

If global temperatures increase by 4°C by 2100, projections suggest sea level in the DCIoS region is very likely to rise by between 0.24m and 0.38m by 2050 relative to the 1981 – 2000 average (Climate Impacts Group, 2021). Wave height, storm surges and offshore wind speed are also expected to increase as a result of climate change, resulting in more intense storm events and greater impacts from coastal flooding. Many communities around the coastline are situated on flat, low-lying areas, or at the rear of exposed beaches, both of which are susceptible to coastal flooding and erosion.

Reduced water availability (drought conditions)

It is projected that decreased summer rainfall will increase the likelihood and length of drought periods and water scarcity in the southwest of the UK (Metcalf et al. 2003). Prolonged periods of reduced water availability will have significant negative impacts on agricultural productivity, commercial forestry and terrestrial and freshwater species and habitats. Droughts will increase the need for irrigation resulting in increased water demand from agriculture and subsequently threaten produce such as salads and soft and top fruits, which are produced across the DCIoS region.

Temperature change and extreme heat/cold

Climate change is expected to increase average temperatures, the number of hot days, summers, heatwaves, and periods of extreme heat across the UK, particularly in the south of England, including the DCIoS region. These are likely to cause negative health impacts, including directly - from increased illness and death from cardiovascular and respiratory diseases and other chronic health conditions and indirectly through impact on health services, increased risk of accidents (especially drowning), increased transmission of food and water borne diseases and marine algal blooms, and through potential disruption to critical infrastructure (World Health Organization, 2018).

Cascading impacts

Cascading impacts can be triggered by multiple hazards that occur coincidentally or sequentially, creating substantial disruption to human and or natural systems (Collins et al. 2019). There is a large amount of uncertainty in quantifying cascading impacts due to the absence of data and the shifting influence of climate change on different hazards over time (Collins et al. 2019). This uncertainty makes the risks of cascading impacts greater. Climate related hazards place key infrastructure and services at risk from cascading failures (e.g. power outages caused by high winds would disrupt operations at the Isles of Scilly's desalination plant, which would have considerable implications for the populations' fresh water supply). Across the DCIoS region there is the risk that interaction between named hazards could result in the compounding of impacts across different systems.









Pathways to action

The annual Local Entrepreneur Forum and 'Community of Dragons' in action at The Glade, Woodland Presents. Photo: J. Brady

There is a clear need for tangible action. The proposed pathways in this section of the report include recommendations for strategic measures, collaboration, communication and a series of direct activities.

- 3.1 A robust joined-up local adaptation strategy and adaptation network
- 3.2 Countering climate risk through supported risk taking
- 3.3 Mutual learning, livelihoods and support
- 3.4 Regenerative tourism: boosting local livelihoods
- 3.5 Community-generated revenue allocated to adaptation projects

3.1 A robust joined-up local adaptation strategy and adaptation network

Climate change impacts are not going to fall neatly into local policy areas, which is why adaptation requires a joined-up approach. A local strategy will need to link layers of governance from Westminster right down to towns and parishes. South Hams District Council is well placed to show leadership in climate adaptation and will need to use its limited resources strategically and tactically to help create and lead a district-wide strategy. Communities will be on the frontline of climate change, and will need to be supported to work towards both adaptation (responding to the Long Emergency) and mitigation (net zero).

Collaborative Strategy

We propose the collaborative creation of a South Hams Climate Adaptation Strategy. This will sit within the existing wider South West and Devon climate adaptation work and provide the bridge between existing policy and future delivery. It will be a catalyst to action.

The proposed strategy will focus, initially, on the South Hams area but fully recognise the need to work across administrative boundaries within the bioregion if it is to succeed. It will, in this respect, align to the wider range of cross border working already in place across South Devon, Torbay and Plymouth.

Fundamentally the aim is that the Strategy is a collaborative creation between the Council, communities, organisations and individuals. The Strategy can be developed by citizens and policy-makers, using the approach that BLC evolved for the action learning process and analysis that resulted in the <u>Devon Doughnut</u>. For that we invited an online community of Devon citizens to select key change scenarios in a wide range of societal and environmental domains, agree indicators and develop health metrics creating pathways to action. The more people who contribute and feel heard means more learning together, more joined-up thinking and more ability to share ideas, data and resources. This strategy may utilise the government's <u>Climate Adaptation Toolkit</u>, which could also be a useful tool for individual local authorities in developing plans for their specific area.

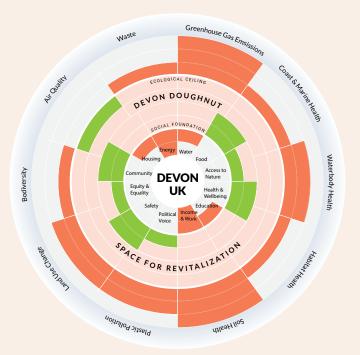
The Role of SHDC

SHDC provides support to the emergency services during major emergencies, as well as information and advice to residents and businesses before, during and after an emergency. In the context of climate change as a long emergency, there is an opportunity here for SHDC to show leadership by helping to build capacity within the district.

Beyond this, climate adaptation must be considered as fundamental to the entire work of local governance bodies including the district council, underpinning all decision making going forward. This means identifying all the functions covered by the council and determining specific and tangible actions to incorporate adaptation into pre-existing policy structures. This goes further than planning for disruptive events into putting in place partners and a steering group of experts for the adaptation strategy that can support the Council in region-wide planning ahead.

As already noted, the implementation and delivery of a Climate Adaptation Strategy, and the structures to support this, already form part of committed SHDC activity. Thus the outcomes of this paper deliver planned SHDC activity which includes:

- Adopting a Climate Adaptation Plan (into which the Pathways to Action set out in this report fit seamlessly)
- Convene the Advisory/Stakeholder Panel (to consider, adopt and oversee the implementation of the Climate Adaptation Plan)
- Our ambitions around Climate and Biodiversity are a consideration through everything we do



The 2020-2021 <u>Devon Doughnut pilot</u>, produced in 2020, was based on the principles of Doughnut Economics. BLC invited an online community of Devon citizens to select key change scenarios, agree indicators and develop health metrics for forward travel along pathways to action.

Adaptation Network

An adaptation network puts the strategy into action, bringing an ecosystem of actors across the area into productive relationships to educate and learn, connect and field-build, mobilise and coordinate - citizens, projects, partnerships and resources. This could give rise to ongoing 'citizen councils' that work with SHDC and decide how to allocate resource for community-led action. This aligns with the current SHDC suggestion to create a Climate Advisory or Stakeholder Panel and to assist in delivering on the <u>SHDC aim</u>: To make the South Hams an exemplar for other local authority areas by showing what can be achieved.

Communications Platform

The development of a strategic communications plan with the community that comes out of a collective understanding of local dynamics is vital in encouraging involvement and supporting an adaptation strategy. This will enable us to build a network and design pathways for action. As well as to build support for practical projects like those we saw on the Learning Journey. The plan might point to a new or existing platform and/or a process for coordinating, sharing or evolving various communication efforts. The intention would be to deliver information about what to do to get ready for climate adaptation. 'Climate Adaptation in the South Hams' is not an easy-to-grasp concept for most people as both the concept and practical reality of bringing about a state of awareness and action need explaining. This means giving the initiative an identity and co-designing an interconnected range of experiences, stories, information and activities that are funded over time and that people can relate to, very much like building a brand.

Practical next steps

Social Media Announcement

A news release and social media campaign to explain SHDC's supporting role and participation in a community-wide approach to local climate adaptation. This would be the first step in the development of an Adaptation Communications Programme.

Town Council Event

Kingsbridge Town Council are leading the way in flood risk management from the sea and have experience of getting an <u>Emergency Plan</u> in place. Due to higher tides caused by lower atmospheric pressure and stronger winds driving seawater up the estuary from Salcombe they are experiencing more flooding events and getting the sand bags out more often. When we met with them on the Learning Journey they suggested a round table for all the town councils in South Devon to form a mutual support network. SHDC and BLC, with SusSH, could work together to make that event happen. Climate scenario planning and pathways to action could be a part of that event, as well as unpacking the complexity of grappling with dynamic systems.

Investing in Local Action

Lengthsmen who were traditionally employed by parishes to clear ditches and drains, but whose work was largely taken over by County Councils in England as part of the Local Government Act 1972, are being reemployed. The reviving of this ancient post may require parish and town councils to increase the precept. Holbeton recently responded in this way to increased winter flooding of the village. If this is not an option, communities that feel vulnerable and neglected could explore putting together a team of volunteers to keep the water flowing in ditches and channels. For that to happen, an exploration is needed of whether Parish Councils offer public liability insurance for volunteers, or whether DCC can offer training and public liability insurance (as with the Devon Road Warden scheme, see below p. 32).

3.2 Countering climate risk through supported risk taking

We are going to need a range of responses to climate change as the risk impacts are unpredictable and place-specific. Diverse options for problem solving are always a strength and that is as true for farming as for businesses, public services and communities. However, those responses need to be tested out via trial and error and the financial and legal risks need to be underwritten or lifted off the shoulders of those willing to experiment. This was a live issue at the 'Devon Prepared' Whole Society Resilience Forum which Devon Communities Together held on 22 March 2024 at the Kenn Centre outside Exeter.

On the Learning Journey we heard from farmers experimenting with growing different crops in different ways in response to climate change, or managing their fields for livestock through experimental mob grazing. All the farms (Porsham, Flete Estate, Riverford and Huxhams Cross) had needed to weather a period of risk over the years in which their land was in conversion from industrial-type farming to farming with nature. There were times of financial loss before they saw yields start to increase.

For our food supply in South Devon to be more resilient we need to regenerate our soils in order to retain topsoil and maintain their fertility and farm for biodiversity as well as human consumption. The 2024 report 'The South Hams Food Economy' by Andy Johnson goes deep into the benefits of a local food economy, which we are not seeking to duplicate here.

We also learned about the problems of farming succession: of elderly farmers who do not have sons or daughters who want to follow them into farming and who have no heir to hand the farm on to. At the same time there is a younger generation of aspiring farmers in their 20s and 30s who are looking for farms and want to farm regeneratively. We see the need for a central UK agency (such <u>Terre de Liens</u> in France) that performs a match-making role, introducing young farmers who have no land and are not risk averse to the elderly farmers. There will be legal issues around family inheritance that need to be figured out so this is a central government policy issue. It is possible that the <u>Agroecological Learning Collective</u> (launched in the UK during June 2024) or other groups may be able to take on some role in this.



Practical next steps

Policymaker Farm Visit

BLC is in touch with the land use team at Defra and is organising a visit from them to South Devon to meet the regenerative farmers here who are leading the way. Farmers need financial support to take the risky step of conversion, while younger innovative farmers need access to land and for that we need a central government policy change. We will be looking at specific options around alleviating risk and developing recommendations that can be tested out in South Devon.

Farming for Nature Programme

Lifting up farmers in South Devon to be beacons of adaptation would shift their public perception from being a problem to leading the solution. The Farming for Nature programme in Ireland, led by Brendan Dunford of Burrenbeo, has been successful in gathering money and expertise to provide incentives to farmers to make the conversion to farming for nature. Farmers work with a simple assessment of the health of their farms and are given money that matches what they are achieving. They also become part of a mutually supportive learning network that meets every year. We heard from Harriet Bell at Riverford that the Dartmoor Hill Farmers collective had been to County Clare to meet with Burrenbeo. BLC is in touch with Brendan Dunford and we could explore how to bring this model to South Devon, with a focus group of local farmers.

One possible action is to find an exemplary farmer who is respected by others in the industry and is financially successful to take up a mentoring role and influence other farmers. Investing funding in a small network of demonstration sites could raise the profile of regenerative farming and act as a lever for social contagion whilst building a community of like-minded farmers who support each other. We want to find the people who are engaged in adaptation and shine a spotlight on them. Shifting the local perception of farmers from being despoilers of rivers and the land to being heroes of adaptation, not demonised but driving change, would bring new energy to farming adaptation in South Devon.

Left, top: The mob, mob grazing. Photo: B.Kennerley. Left, bottom: Community pothole mending. Photo: Newton & Noss Parish Council. Right, top: A traditional livelihood still in practice on the Flete Estate. Right, bottom: A wise message. Photos: J.Brady

DCC promotes its Devon Road Warden scheme more widely

On the Learning Journey we heard about the community group in Noss Mayo who took pothole-mending into their own hands to fix potholes causing cars to need costly repairs. The potholes were exacerbated by heavy rainfall events.

The group was supported by Newton & Noss Parish Council under the Devon Road Warden Scheme. This allows Devon County Council to offer Signing & Guarding training, required equipment, and Public Liability insurance for volunteers (with N & NPC insurance covering personal injury). By lifting the legal risk, DCC enabled the community to diminish the risk of damage to local transport. <u>https://www.devon.gov.uk/</u> <u>communities/opportunities/highway-self-help</u>



3.3 Mutual learning, livelihoods and support

"We support members in many areasfrom those who have difficulty with computer literacy on individual business matters-to advocating for our fishery at an international level. Although we are mainly in shellfish (crab and lobster) we also have members who fish other gears, but who fit with our ethos, so we have small scale rod and line fishermen as well as more novel approaches, such as the single-hand hauled scallop dredgers that fish the tightly managed micro fishery in Salcombe – and commercial fishermen who dive and hand gather species."

- Beshlie Pool, coordinator of the South Devon and Channel Shellfishermens' Coop

One of the more positive findings of the learning journey was to hear how specific interest groups have created networks of mutual support.

Sustainable South Hams continues to connect communities and town and parish councils for shared learning about aspects of climate resilience from composting to river health and how to engage local schools.

Porsham dairy farm is part of the South Hams Dairy Co Op that includes Riverford. This informal grouping of larger farms collectively bulk buys in feed, exchanges knowledge and encouragement, even investment in each others' businesses. The group has proved important for mental health support: offloading worries and helping each other. There is a clear opportunity to see how this links to the SHDC 'Keep It Local' initiative and the additional resources SHDC is placing around food production.



Practical next step

Co-op Feasibility Study

Engage <u>Andrew Shadrake</u> who is part of Cooperatives UK (living in Bovey Tracey) to scope out the possibility of creating South Devon wide co-ops. For instance connecting up farmers who want to sell directly into the community, or the caring centres such as South Brent and District Caring or Kingsbridge and Saltstone Caring that are currently struggling for funds.

The connection between health, social care, and food availability is a key example of the ways in which political and community landscapes intertwine with climate adaptation. Organisations such as South Brent and District Caring or Kingsbridge and Saltstone Caring offer models of supporting vulnerable community members, relying on a significant volunteer force as well as paid staff.

In South Brent, Sustainable South Brent, SBADC, and South Brent Old School Community Centre came together with funding from South Brent Community Energy Society to create a community hub that functions as a warm room, a social area and a working space. This concept of creating a physical community hub is something that could work well in many communities.





Left, top: Photo: South Devon and Channel Shellfishermens' Coop. Left, bottom: Learning about leaky dams, Dartmoor. Photo: I.Carlisle. Top: Learning how damson trees thrive on warm air from poly tunnels, Apricot Centre. Photo: J.Brady. Above: Understanding plant species, their root depths and soil benefits, Flete Estate. Photo: B.Kennerley

3.4 Regenerative tourism

With a positive response to climate adaptation in South Devon under way there is potential for inviting in a new kind of tourism that showcases regenerative farming, ecosystem restoration, and local eco-friendly businesses, shops and restaurants. It would be possible to create a strategy that gives back to this place and offers more livelihoods to local people.

For example, Northern Ireland has a new and well-funded <u>cross-border tourism plan</u> as of July 2023 to help small, rural, local enterprises. Their message is rooted in their culture and creating a new brand from that. They are showcasing micro-enterprises that are owned by people who live in N.I. so income goes back into the local community. This way of offering tourist experiences touches on geology, geography, local knowledge, myths and legends. In the Republic of Ireland the Fáilte Ireland Funding Scheme for regenerative tourism projects in Midlands opened at the same time.

Additional inspiration for a Tourism Plan in South Devon that would generate more income for this region are Visit <u>Scotland's Tourism Plan</u> and the experiences for visitors to the regenerative future that are offered by Flanders' <u>Travel</u> to <u>Tomorrow</u>.







Practical next step

Tourism Plan

Invite key people, including SHDC Councillors, to a round table to explore this. Possible future collaborators are farmers, ecologists, community groups, parish and town councils, tourism destination managers, the hospitality industry, Dartmoor National Park, the Environment Agency, Duchy Estates, South West Water, Devon Wildlife Trust, South Devon National Landscape, the National Trust and Dart Harbour Authority.

Far left page: Regenerative agriculture, Flete Estate. Photo: B.Kennerley. Left page, top: Noss Mayo marina looking like the Mediterranean. Photo: J.Brady. Left: A healthy lunch from City College Plymouth students and staff who collaborate with Porsham Farm to connect learners with the land. Photo: B.Kennerley. Below: Yealm Community Electric Water Taxi, Noss Mayo marina. Photo: T.Ebbrell



3.5 Community-generated revenue allocated to adaptation projects

It became clear on the Learning Journey that communities that owned an asset that could generate revenue were more resilient than those that could not. Both South Brent and the Yealm Community Energy enterprises have been able to direct surpluses to support projects that boost climate adaptation.

Yealm Community Energy was formed in 2015. The community energy group of 5 volunteers took 3 sites within an AONB and had 3 solar farms constructed. All surplus from the solar farms is redirected back into a community energy fund that gives grants to local environmental projects in the 5 parishes that the solar farms serve. To date YCE has donated over £120k back into the local communities. One of the landowners who leased the fields at Newton Ferrers for the solar panels was enabled by that income to diversify into organic. Sheep now graze under the panels and there is good biodiversity gain with cirl buntings and red kites both being seen nearby.

At the time of Covid a £10k emergency relief fund was also donated by YCE for the 5 local parishes. From a brainstorming session at this difficult time a pioneering project was born from YCE to form Yealm Community Electric Transport. A first in the UK to deliver a community run carbon neutral ferry on the River Yealm. An initial grant from Power to Change and a further £10k from SHDC Climate Change Infrastructure fund allowed this project to go from concept to delivery within 18 months. Major donors and community donations also match funded the project.

In South Brent, the community-owned 225 kW wind turbine has generated over £0.25 million for the community since its installation in 2013. This money has been used for grants to local organisations for projects with a focus on infrastructure and energy saving, including South Brent & District Caring's warm room and winter lunch club initiative. South Brent Community Energy Society initially formed as a sub-group of Sustainable South Brent after a screening of Al Gore's 2006 film 'An Inconvenient Truth'.

With only a single wind turbine, downtime due to mechanical or electrical failure has a major impact on South Brent Community Energy Society's finances, which fluctuate from year to year. Long term resilience of this and similar initiatives require a broader range of generation assets so that loss of any one can be more easily managed.

It is also clear that the society requires professional, paid, 'back office' support so that running the society is less of a burden on the volunteer board of directors. This is being actively addressed. Nationally, the UK has a growing shortage of skilled technicians with the experience required to maintain small community-scale renewable generation and this may be the limiting factor in the long run.



Practical next step

Pipeline of Investment-ready Projects

We came across a number of valuable projects such as the Flete Field Lab on the Flete Estate that is successfully taking e-coli out of running surface water using mycelium-injected filter sacks. However, they are not robust enough businesses to receive the significant investment that they need in order to grow and have a greater impact in South Devon. We need to set up or partner with a professional organisation that makes it their business to get small enterprises investment ready.

One model for this is the collaboration between <u>Fibershed California</u> and <u>Provenance Capital</u>. Provenance Capital Group is a San Francisco-based financial services firm specialising in investments whose timeline fits with Earth's natural regenerative systems, as opposed to the extract-and-deplete ethos behind many human interactions with nature under industrial capitalism. They prepare and connect early-stage companies with longterm investors such as pension funds or insurance companies looking to protect their portfolios against climate change.

BLC had a conversation with both organisations in June 2021 to discuss how they work together and they have offered to guide us in our next steps. We propose that this could be one of the most impactful interventions that we could make.

Community led solar schemes, South Brent Community Centre (left), Yealm Community Energy (below), photo T.Ebbrell







The Learning Journey

Yealm Community Water Taxi. Photo: T.Ebbrell

The Learning Journey was like taking a core sample from the soil. It showed us what could be put in place to amplify the adaptation that is already underway, embolden public discourse, and invite more people to learn, understand and take action themselves.

4.1 Design of the Learning Journey

4.2 Monday

4.3 Tuesday

4.4 Wednesday

4.5 Thursday

4.6 Friday

4.1 Design of the Learning Journey

The Learning Journey was designed as a mix of site visits, informal chats with business and community leaders and informed discussion about the risks and challenges that climate change is bringing.

Before the Learning Journey, we asked:

How do we in South Devon learn together and grow our capacities to step up to the challenges of climate adaptation?

What makes it possible for communities to be first responders to the long emergency?

Where is policy change needed in order to enable grassroots and business adaptation?

What are the practical case studies that inspire us and that we can learn from?

We explored how to grow the capacity of citizens and policy-makers to work together. With policy-makers showing leadership beyond the tramlines of their statutory powers and responsibilities, getting resources into communities and giving them some decision-making powers for their own futures. And with citizens being able to mobilise together in the face of immediate emergencies like flooding while able to collect, interrogate and share data for informed long-term planning.

We gathered feedback at the end of each day from those on the Learning Journey bus, inviting people to fill in postcards that asked questions about their experience. Overall, we found that many attendees were thinking about large-scale societal and economic change, which is necessary for much adaptation but out of our hands, and were struggling to see specific local action and the purpose of doing this in the face of such a large issue.

Stops on the Learning Journey

Monday:	Porsham Farm and City College Plymouth, The Apricot Centre at Huxhams Cross Farm, Dartington
Tuesday:	Dartmoor Headwaters Project, above Buckfastleigh, Dart Harbour & Navigation Authority, Dartmouth
Wednesday:	Flete Field Lab and Flete Estate, Yealm Community Electric Transport (YCET), Newton Ferrers
Thursday:	Sustainable South Brent (SSB), South Brent Old School Community Centre, South Brent and District Caring (SBADC) and South Brent Community Energy Society (SBCES), Woodland Trust, Aveton Wood, Devon Wildlife Trust Avon Valley Project, Brimridge Farm
Friday:	Kingsbridge Town Council, Kingsbridge in Bloom, Kingsbridge and Saltstone

Find the full Learning Journey report, who came and who we met in the Appendix.

Caring, Riverford HQ, nr Buckfastleigh



4.2 Monday

The Learning Journey started at Porsham Farm, a 220acre working family dairy farm just north of Plymouth. Concerns about water availability led farmer Will Luke to the Apricot Centre's course on regenerative agriculture and from that came a farming approach that includes reshaping the water flow above and below the farmyard, mob grazing cattle in twelve-hour paddocks, and finding alternatives to chemical farming.

Lunch was provided by students and staff from City College Plymouth, who collaborate with Porsham to connect learners with the land. This partnership benefits Will & Tanya Luke - who can sell their meat directly whilst sharing their knowledge - and the College, which is able to offer students a hands-on experience of using local meat.

What did we learn?

- Noticeably drier and hotter summers leading to micro droughts, rain not soaking into the soil, and sometimes the need to graze cows outside during the night and keeping inside during the day - which cows will adapt to! One partial solution is agroforestry in fields, planting for dappled light.
- Farmers are not connected into their local community in the way they were for previous generations, leading to a lack of shared understanding and effective communication.
- Huge risks to entire livelihoods can hold back innovation and exploration of adaptation possibilities for farmers something that government support often fails to take into account. To tackle this risk, farmers need to know what will work as well as what will not, bearing in mind that there is no one formula for farming in South Devon.
- Porsham is part of the South Hams Dairy Co-operative, an informal grouping that can purchase collectively and share knowledge and encouragement, crucial for supporting farmers' mental health.

We then visited the Apricot Centre at Huxhams' Cross, near Dartington. This 34-acre piece of land was purchased by the Biodynamic Land Trust in 2015, and taken on as a tenancy by the Apricot Centre, operating as a low carbon, resilient, biodiverse farm that produces food for local people and also offers a wellbeing service for children and families. The Apricot Centre runs a variety of courses, including year-long Level 4 training in Regenerative Land-Based Systems. The wide variety of income streams means that it has a £1M annual turnover, making it a really useful example for farmers looking to diversify with confidence that they can become more resilient whilst still making a living.

The group finished the day with a discussion supported by Harriet Bell from Riverford. The risk and stress that farmers shoulder in innovating for climate adaptation was a key topic. We also covered harnessing the multigenerational aspect of farming towards adaptation, the importance of farm land management in helping protect homes (e.g. managing the movement of surface water preventing flooding) and the role of policy makers in lifting the risks of experimentation for future resilience.

What did we learn?

- The Apricot Centre is part of the newly-established Agroecological Learning Collective, and is intending to get their courses replicated and set up elsewhere in the country.
- Growing agroforestry strips along sloping land contour slows water movement and also creates a smaller scale farming system, which is beneficial for the mental health of farmers and harvesters, who can then approach these smaller areas rather than a huge field's worth of work.
- Highly prescriptive rules around farming grants or rewards can end up penalising those who attempt to innovate and experiment, plus filling in forms can defeat many farmers and prevent them from accessing grant funding.
- South Devon farmers benefit from a community of similarly-minded people, unlike the North of England where many regenerative farmers are extremely isolated. The norms of the local community can really have an impact on what feels like either innovation or 'too much'.



4.3 Tuesday

We started on Dartmoor with the Dartmoor Headwaters Project, which has involved the creation of various natural flood management (NFM) interventions on the moor. These low-cost and replicable measures slow the flow of water off the moor, protecting towns such as Buckfastleigh from flooding while boosting wildlife.

Stone dams, rebuilt walls, rock-armoured slopes, leaky dams and willow whip planting are some of the tactics the project has used. None of these would be possible without thoughtfully developing agreements with both landowners and commoners.



What did we learn?

- Stone dams help to slow the peak flow, with an overall aim to flatten the discharge curve below where the river would start to flood. The restoration we looked at has slowed the flow by a full 20 minutes.
- Most peatlands are currently a carbon source rather than a carbon sink only 1% of Dartmoor's peat is intact.
- Effects of increased rainfall due to climate change are exacerbated by water runoff due to soil compaction, fewer hedgerows/trees and impermeable urban surfaces. Work supporting farmers to understand subsidy schemes and the information available can look to tackle some of these issues.

In the afternoon we met with Dartmouth Harbour Master Paul Britton who told us that rising sea levels combined with extreme low air pressure and high winds during particularly high tides are already leading to near flooding. From a local economy standpoint, there are concerns about recreational sailors feeling unsafe about sailing off Dartmouth. The berths for leisure boating up to Totnes are already only usable in summer. Beshlie Pool, coordinator of the South Devon & Channel Shellfishermen Co-Op, was unable to meet us but sent us a message about food security. She noted a feeling in the industry that the UK Government doesn't adequately recognise UK fishing as a food producer. The unadventurous food choices of the British public also mean that we fail to take advantage of local options, such as the spider crab (AKA Cornish/Devon King Crab), and therefore miss out on opportunities to support local food production.

What did we learn?

- Anything over 5m is a big tide for Dartmouth January saw a 5.5m tide and a 6m tide would be likely to cause significant flooding.
- In terms of the sewage system, rainfall is what overwhelms the infrastructure and leads to pollution in the River Dart.
- Dart Harbour has converted an old boat into an electric yacht taxi which can operate one six-hour shift per charge, showcasing possibilities for electric transport.
- There is potential for expanding consumer tastes towards produce from the local fishing industry.

4.3 Tuesday



4.4 Wednesday

The Flete Estate lies just above Mothecombe Beach at the mouth of the Erme River and is owned by the Mildmay-White family. It is home to the Flete Field Lab, 'a land-based experimental programme of soil and water regeneration trials'. We walked down through the meadows to the location of one such trial, looking at the potential for mycelium to filter out bacteria from the water.

Mycofiltration wattles (sacks containing fungi spores mixed with beech sawdust and barley) are incorporated into leaky dams. The fungi, an oyster mushroom, is evolved to consume, neutralise and adsorb particular chemicals or bacteria through bio-adsorption and the creation of enzymes.

What did we learn?

- We have lost about 80% of our fungal biodiversity in this country, so projects such as these serve multiple purposes in considering the impacts of climate change, biodiversity loss and pollution
- The fungi in the Field Lab trial can remove between 27-48% of E. coli from the water.

Up on the main estate, John Mildmay-White talked us through his process of regenerative agriculture since taking over the farm. An important part of his work has been to prove that the approach he took was economically viable and financially resilient, making more of a profit than if it was rented out, whilst also being ecologically and socially sustainable and building strong ties with the local community.

The land is mob grazed on a rotation of more than sixty days, allowing for flowering and grass growth, with plants putting down roots that go a lot deeper into the soil. New habitats are created through herbal leys, hedges, ponds, muddy banks and scrubby edges around woodland. Worming treatment is targeted rather than prophylactic, and the cattle are kept out all winter with bale feeding. Using Farming in Protected Landscapes support, John has been able to monitor wildlife, finding an increase in skylarks, hares, meadow pipits, hedgehogs and more.



The beef is sold to local people through a box scheme that is price matched to Tesco, in order to ensure that the high quality produce is not just available to wealthier members of the community.

What did we learn?

- Defra's 18 month payment cycle for the Environmental Land Management Scheme (ELMS) makes it difficult for farmers to balance their books
- Grasses and meadow plants that grow roots much further into the soil than standard grasses support the creation of a healthy soil system
- The government pays a subsidy for herbal leys through ELMS

After lunch, the group visited Newton Ferrers to learn about the ambitious development of the Yealm Community Electric Transport (YCET) water taxi project. The Paul Darlow, named after the late chairman of YCET, operates daily on the River Yealm as a convenient and sustainable mode of transport. With funding from SHDC Climate Infrastructure Fund, Power to Change, Yealm Community Energy benefit fund and the local community the YCET team were able to take the project from concept to delivery in 18 months, sourcing the boat from the Netherlands. They are now supporting Calstock in setting up a similar project. The project has been used as a exemplar case study locally, regionally and nationally in making a step change towards marine targets of net zero by 2035. The project has seen local boat owners transfer their own diesel and petrol polluting outboard engines to clean, quiet electric outboards.

Whilst there, we also heard about the community pothole project, which is coordinated and carried out by local volunteers. The group learned from the Modbury pothole team, gained proper training in signage, use of the machinery and health and safety, and then began using the simple process of pothole filling to solve the problem within their own community. With funding from the county council topped up by the parish council, the group is able to transfer important knowledge and empower citizens to engage in community adaptation. The project is now transferring its knowledge and pothole training to Holbeton and other parishes nearby.

Left, top: Mycofiltration wattles, Flete Field Lab. Photo: J.Brady. Left, bottom: Improved soil quality in a mob-grazed field (you can smell the difference). Photo: J.Brady. Right, top: Yealm Community Water Taxi. Photo: T.Ebbrell. Right, bottom: Our communities can fix crumbling pavements and roads. Photo: J.Brady



4.5 Thursday

A visit to South Brent offered the chance for the participants to experience collaboration between community groups and the importance of thinking across a wide spectrum of community concerns.

We heard from Sustainable South Brent (SSB); South Brent Old School Community Centre; South Brent & District Caring (SBADC); and South Brent Community Energy Society (SBCES). SSB and SBADC have worked together (with funding from SBCES) to develop a community Hub in the Old School Centre. This functions as a space for education and work that powers sustainable projects in the village and also offers a welcoming space and warm hub for vulnerable village residents.

The group visited SSB's community composting site, the Marsh, to hear about its origins and how it functions as a connector with demographics in the village who might not otherwise be interested in topics of the environment and community resilience. It is also an income generator for the charity through sales of compost and wood from the Hedge & Wood volunteer group.

What did we learn?

- South Brent & District Caring is really significant to the community in terms of health and social care - there is a policy need for appropriate support but realistically communities often need to fill gaps in connecting up services and signposting residents.
- SSB's Community Fridge project has a wide social reach and serves multiple adaptation needs around food waste and food security.
- SSB was founded in 2006 and has about 350 members, out of a village population of around 3000, with about 80 active volunteers.
- Collaboration requires physical spaces to meet and people to make that happen. There are issues around volunteer fatigue, particularly for projects and Trustees.
- SBCES installed a wind turbine with community investments in 2013 and uses the income from this to fund community projects including the Hub.

At Aveton Wood, Sam Manning of the Woodland Trust discussed the ways in which woodland management can be part of thoughtfully rewetting the land, managing floods and supporting 'old growth rivers'. Woodland Trust staff and volunteers have felled and left conifers, then added leaky dams and planted willow. We could see the success of this in the silt build up and growth of yellow flag iris.

The simplicity of felling trees to lie across watercourses can be easily replicated elsewhere. For rivers, this has the support of the Environment Agency while Devon County Council is the authority for similar work on local tributaries.

What did we learn?

- Salmon populations act as the 'canaries in the coalmine' for river health, with anglers as first line responders.
- A lot of land has centuries-old drainage pipes that need to be removed or filled in, with willow encouraged to grow disruptively through, in order to keep water on the land.
- The growing interest in Atlantic Rainforests offers an opportunity to look at whole ecosystems rather than individual species or habitats.

Finally, we took a walk around Brimridge Farm with Lynne Kenderdine from Devon Wildlife Trust who discussed the Avon Valley Project and Brimridge's role in that. This land is owned privately, but 'leased to nature'.

A particular focus was on providing a habitat for barn owls, which has been a great success - one of our journeyers even saw a barn owl leaving one of the nest boxes in the barn. Ponds have been created on the land with the ongoing intention to widen out the water and slow the flow, and there is a plan to plant more trees. Ideally, Lynne would like to encourage the neighbouring landowners to plant hedges that bridge the gap between Brimridge and the Woodland Trust woods.

Right, clockwise: Woodland management at Aveton Wood. Photo: B. Kennerley. Slow it, spread it, sink it - tree trunks laid across watercourses Photo: Woodland Trust. The revitalised South Brent Community Centre and composting scheme. Photo: I.Carlisle. Wind turbine. Photo: Pexels.



4.6 Friday

We saw how community collaboration with local organisations boosts climate adaptation with a visit to Kingsbridge. Here, the need for adaptation has been thrown into sharp relief by numerous disruptive floods of sea water spilling up fom the estuary.

Town councillors and staff along with key local residents act as first responders, planning forward for bad weather and high tides, preparing sandbags and other necessary equipment, and then heading out in high visibility wear in readiness. However, the council is keen for homeowners to understand, and take responsibility for, how to look after their own properties as well as being supported.

Preparations include flood leaflets, inflatable sandbags, the installation of Devon County Council's 'smart gullies' and engagement with the Devon Resilience Innovation Project (DRIP). The council often works collaboratively with Kingsbridge Climate Action, developing educational material and supporting events like the Kingsbridge Nature Festival.

We also heard about the work of Kingsbridge in Bloom, which has involved the local community in wildflower planting. The Journeyers were interested to have a look at their mediterranean bed, which is trialling plants that are likely to withstand climate change in the area.



The visit was supplemented by a trip to see a local citizen gardener, who is working to create a thriving solar-powered garden, including wheatgrass production, amongst the ancient architecture of the town. We also heard from Kingsbridge and Saltstone Caring who followed up the message we heard on Thursday from SBADC around the need for connected up care, and visited the community garden.

What did we learn?

- The clear presence of environmental changes in the form of increasing flooding engages the community, to the extent that Greenpeace climate change information sent out by the council was entirely well received.
- It is important to both focus on doing good work in your own community, looking to the specific needs and resources there, as well as sharing knowledge to other areas.

Our last stop of the journey was at Riverford, where we met up again with Harriet Bell, the Regenerative Farming Lead. During a tour of the farm, we had a wide-ranging discussion on the realities of food production in the face of a changing climate.

We considered how organic farming is generally better for the environment, but presents its own difficulties and still faces many challenges of traditional farming. For example, we are failing in problem-solving around water and irrigation - this is best done at night, but that is very limited by practicality and the health impacts on shift workers. It's important to be upfront and honest about what issues farming (including organic) is facing in order to highlight where solutions are needed.

Bringing our conversation full circle to Monday morning's visit to Porsham, we discussed the need to bring farmers into the community and to stop demonising them whilst overloading them with information and outside pressures. There are other options for grants and reward schemes that enable farmers to understand and enact the best options for them (e.g. Payments by Results system) instead of top-down generalised schemes. We also discussed the possibilities around mycorrhizae loss in the soil having significant impacts on growth, and how much climate change impacts on nature's ability to recover itself. After the 2022 drought, lots of problems were noted that might be linked to decreased soil fungi, and increasingly stressed plants are then laid open to other issues.

In terms of consumers, we learned that it is harder to find perennial crops that are palatable to customers, and so these haven't had the breeding development work that makes annuals commercially viable.

What did we learn?

- Farm machinery is generally developed for the mainstream system, assuming big flat swathes of land using big machines. This scale is often inappropriate for smaller or more innovative farms, meaning that vegetable growing ends up being either massive or market garden scale with little space for middle ground production.
- A huge amount of information on best practice, climate change and subsidies is available for farmers. But finding the time to get to grips with what is relevant can be incredibly difficult. Providing clear, useful information for specific locations is key to supporting transformation.
- Westcountry Rivers Trust are considering possibilities around 'Water Net Gain', paying farmers to retain more water on the land. Soil would effectively be seen as a storage tank in our geological landscape of hard rocks where we lack aquifers and have fast-flowing rivers.

Left: The work of Kingsbridge in Bloom. This page: Harriet Bell speaking to the realities of food production for Riverford in the face of a changing climate. Photos: B.Kennerley.









Questions, next steps and the work of BLC

Syrinx, the reed bed at Sharpham Marsh by Ivan Grieve

"[The Learning Journey] helped me understand how existing community hubs and assets are important in our response to the impacts of climate change and how recognising this could help support their work."

Questions for discussion within SHDC

Next steps

The work of BLC

5. Questions, next steps and the work of BLC

Questions for discussion within SHDC

What is needed for SHDC to find the capacity, resource and energy to take on some of the practical next steps listed above? Which ones could they lead on, which ones could be in partnership with local organisations, and which ones could they put some resource towards?

How best does SHDC bring into effect its commitment to deliver a Climate Adaptation Strategy, Stakeholder Panel and to place climate (and biodiversity) central to all its activities? How best can BLC and other local organisations upport this collaborative process?

Could BLC step into a convening role for the South Hams Climate Adaptation Strategy? Who would the initial partners in that be?

Could BLC convene and support the stakeholder panel/advisory group? How would this operate to best effect?

How can these issues be addressed at a higher government level and what is needed to take this conversation up a rung?

Next steps

- Convene a round table discussion with Councillors and officers at SHDC, Sustainable South Hams and other mutually agreed bodies to discuss this Discussion Paper and a plan of action.
- Start to design the strategy and convene the advisory panel/steering group to guide its development and delivery. What is the promise beyond the strategy? How will it be held long-term?
- Consider how the next steps proposals in this Paper are embedded into the Strategy.
- Our film of the Learning Journey, *"Sensing, Learning, Changing: How South Devon is adapting to climate change"* accompanies this Paper. It premiered on 11th October, 2024 at the Councillors Symposium organised by Sustainable South Hams. Alongside that Isabel Carlisle and Bridie Kennerley from BLC and Rod Birtles from Devon Communities Together led a workshop on emergency planning and climate adaptation.
- The film is now publically available on BLC's YouTube channel, <u>Bioregional TV</u>. A higher quality version is being offered to all South Hams towns and parishes for a screening in their communities with the offer of an accompanying workshop or networking event. This is part of an ongoing fact-finding mission to understand what towns and parishes need in order to adapt.



The work of BLC

The goal of BLC is to create a resilient region that functions as a learning landscape by making collaboration possible and giving civil society a leading role alongside landowners, experts, NGOs and policy-makers. The Bioregional Learning Centre is engaged on a two-year plan of action to grow our capacities within our South Devon bioregion to step up to the challenges of climate adaptation. We are focusing on:

1. The capacity to see systems, to think in systems and take systemic interventions at the leverage points that will yield maximum results.

The leverage points are often the 'friction points' where geosystems (rising sea levels, rising temperatures) on the move collide with human systems (think health care, roads) and bump into ecosystems (think rivers, soil, biodiversity corridors). We can create 'lenses' to look into these friction points and try and understand what is going on and what action to take.

2. The capacity to convene at landscape scale, to bring many different people together around an issue that people care about, and to frame that issue as action learning. Then take decisions together as part of local governance.

As we enter uncharted territory with climate change, figuring out how to adapt is going to take all of us working together. There will be some responses and adaptations that work better than others but there will be no orthodoxy or right or wrong pathways, just actions that work and others that don't. Adaptation means being flexible in an increasingly dynamic environment.

3. The skills to tell a story, to communicate well, to base your story or case study on facts as well as lived experience.

The narrative that we are able to share with others will be more or less compelling according to how 'real' it is, how relevant it is to local people, how it opens up ideas of the kind of roles that people can step into, how resonantly it tells a story of the past, present and future of our places.

4. The capacity of citizens and policy-makers to work together.

Policy-makers showing leadership beyond the tramlines of their statutory powers and responsibilities. Getting resources into communities and giving them some decision-making powers for their own futures.

Citizens being able to mobilise together in the face of emergencies like flooding (the first responder idea). But also being able to collect data, interrogate data and share data so that informed decisions can be made.

"[To grow the region's capacity to adapt, we could] enhance strategically placed natural capital that will take a while to establish but will increase our resilience in future... raise awareness in individuals and businesses of their sectoral and location specific exposure to climate risks and how they can increase their resilience... encourage businesses to consider whether they are adequately insured - many are not and this will make it harder for them to recover from incidents. Strongly promote subscriptions to flood warnings from the EA. Support the mental health of those impacted by flooding etc. or their long term resilience will be diminished by one incident."





Appendix

Fleet Mill, Dart Estuary; drone imagery reveals detail in the land/sea interface. Photo: Dart Harbour & Navigation Authority

"[I feel] determination to join [those working on climate adaptation] in their endeavour to increase our resilience and self reliance, and to continue the fight to persuade government to enable their efforts to succeed."

Who came on the Learning Journey

Who we met

Quotes from participants

6. Who came and who we met on the Learning Journey

Who came

Monday

Jacqi Hodgson (Totnes Town Council, South Hams District Council, Devon County Council), Maren Freeland (Landmatters Permaculture Community), Patricia Hannam (Ermington Parish Council, Ermington Environmental Group), Marc Biddle (The Deer Wood Trust), Simon Rake (Blackawton Parish Council, South Hams District Council), Ruth Leonard-Williams (Sustainable South Hams), Ruth Coe (Blackawton Parish Council, Sustainable Blackawton), Paul Pizzala (New Foundation Farms, Ethex), Andy Johnson (Homme de Terre), Michelle Krieg (formerly Occidental Arts & Ecology Center), Adam Williams (South Hams District Council Climate Change Specialist), Samson Hart (Bioregional Learning Centre)

Tuesday

Jacqi Hodgson (Totnes Town Council, South Hams District Council, Devon County Council), Simon Rake (Blackawton Parish Council, South Hams District Council), Ruth Leonard-Williams (Sustainable South Hams), Ruth Coe (Blackawton Parish Council, Sustainable Blackawton), Sune Nightingale (Sustainable South Hams), Barbara Phillips (Totnes Climate Hub), Robin Lacey (Sculptor), Adam Williams (South Hams District Council Climate Change Specialist), Rod Birtles (Devon Communities Together)

Wednesday

Jacqi Hodgson (Totnes Town Council, South Hams District Council, Devon County Council), Maren Freeland (Landmatters Permaculture Community), Lee Bonham (South Hams District Council), Steve Deeming (Ermington Environmental Group), Ruth Coe (Blackawton Parish Council, Sustainable Blackawton), Martin Fodder (Sustainable Cornworthy, Sewage Scrutiny Group), Tessa Trappes-Lomax (Wild About The Erme River), Jane Nichols (Sustainable South Hams), Tracy Ebbrell (Bioregional Learning Centre, Yealm Community Energy), Jane Brady (Bioregional Learning Centre)

Thursday

Maren Freeland (Landmatters Permaculture Community), Lee Bonham (South Hams District Council), Simon Rake (Blackawton Parish Council, South Hams District Council), Jane Nichols (Sustainable South Hams), Emily Reed (Devon County Council Climate Emergency Project Manager), Sara Gibbs (Consultant in Public Health), Ruth Coe (Blackawton Parish Council, Sustainable Blackawton), Michelle Krieg (formerly Occidental Arts & Ecology Center), Hayden Gabriel (Sustainable South Brent), Adam Williams (South Hams District Council Climate Change Specialist)

Friday

Steve Deeming (Ermington Environmental Group), Liz Kennerley (Sustainable South Brent), Ruth Coe (Blackawton Parish Council, Sustainable Blackawton), Michelle Krieg (formerly Occidental Arts & Ecology Center), Ross Kennerley (Sustainable South Brent), Kate Rudd (Bioregional Learning Centre)

Who we met

Monday

Porsham Farm: Tanya and Will Luke (owners, Porsham Farm), Jamie McMurrich and Gemma Outtram (Lecturers, City College Plymouth), City College Plymouth students, Apricot Centre CIC: Rachel Phillips (Director, Apricot Centre), Harriet Bell (Regenerative Farming Lead, Riverford)

Tuesday

Dartmoor Natural Flood Management: Emily Tyack (Dartmoor Headwaters Engagement Officer, DNPA), Angelique McBride (Dartmoor Headwaters Project Officer, DNPA), Dartmouth: Paul Britton (Harbour Master and CEO, Dart Harbour & Navigation Authority)

Wednesday

Flete: Shelley Castle (Co-director, Flete Field Lab), Alice Pefanis (Student, Flete Field Lab), John Mildmay-White (Farmer, Flete Estate), Yealm: Tracy Ebbrell (Co-founder and Director YCET), Richard Robinson (YCET Engineer), Jimi (YCET Skipper)

Thursday

South Brent: Jane Nichols (Trustee, Sustainable South Brent), Ross Kennerley (Trustee, South Brent Old School Community Centre & Sustainable South Brent), Susanne Archand (Charity Care Coordinator, South Brent & District Caring), Joddy Chapman (Company Secretary, South Brent Community Energy Society), Nick Cape (Community Fridge Project, Sustainable South Brent), Eva Stephens (Hub Volunteer, Sustainable South Brent) Woodleigh: Lynne Kenderdine (Land Management Advisory Officer, Devon Wildlife Trust), Sam Manning (Site Manager, Woodland Trust)

Friday

Kingsbridge: Martin Johnson (Town Clerk, Kingsbridge Town Council), Barrie Fishman (Councillor, Kingsbridge Town Council), Graham Price (Chairman, Kingsbridge in Bloom, and Councillor, Kingsbridge Town Council), Stuart (Gardener and Local Resident, Kingsbridge), Graham Nurser (Chair of Board of Trustees, Kingsbridge and Saltstone Caring), Riverford: Harriet Bell (Regenerative Farming Lead, Riverford)

Quotes from participants

'Many people are concerned about climate and biodiversity but unclear what they can do and how to help . They see a major issue and need to change but don't have the time or are fearful of the effort and cost to make changes in their own lives.'

'We don't have solutions, we are learning and trying more and I think the government should be investing in implementing more test and trial spaces.'

'[We need] more recognition of the importance and urgency of change, so that natural systems are promoted, people are educated, and aware of the critical situation we are in. Politicians campaign on, and promise many things, but fixing our destructive ways should be a priority.' 'These challenges cannot be seen in isolation. Clean air, clean water, good nutritious food, healthy rivers and fertile soils are interconnected in that human activities have the ability to promote or deny them - and we depend on these and ignore this at our peril.'

'[Local government needs] joined up thinking about community assets and resource management.'

'[In terms of planning,] both new and established communities need to mitigate the stress they put on the environment by their poor infrastructure and urban design.'

'[We should aim to] embed resilience thinking across the work and decisions of the Council, for example in impact assessments (though earlier in the development of measures is better) and empower communities to support each other.'

'[Let's] ensure all citizens are aware of the consequences of climate change in their community, and provide reassurance that each person, organisation and community is empowered to do their bit!'

'Schooling/education has disconnected from the land and all that is required for human and more-than-human wellbeing/ survival. This would be a big but not impossible shift. [The] economic (neoliberal) model is a key interconnecter.'

'[We need] principles-based regulation and support rather than prescriptive (like financial markets).'

'[We have] got to make it easy for people to implement changes towards climate adaptation - less red tape, concessions, financial backup.'

I do appreciate the view from small projects from people on the ground trying to adapt. Ear to the ground, with humility. It'd be great to all be part of a bigger framework, networked in together.'

'[I feel] concern, grief, sobering; a wish to prepare/adapt more. We still consider everything within the lens of capitalism and eternal economic growth. This needs to change.'

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This is what healthy soil looks and smells like, Flete Estate. Photo: B.Kennerley

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