Co-producing a new Blue-and-Green Infrastructure Strategy for Colchester Borough: Key Findings from the River Colne Pilot

Authors: Kate Seymour; Danson Kimani; Pawan Adhikari; Teerooven Soobaroyen; Kelum Jayasinghe

December 2022





Table of Contents

Abbreviations	4
Acknowledgements	4
1. Introduction	5
2. A New Blue Green Infrastructure Strategy for Colchester City	8
2. 1. Why BGI?	8
2.2. BGI, Partnership and Participation	10
2.3. Participatory Budgeting	11
3. Policy Contexts	13
3.1. National context	13
3.2. Regional Context	14
3.3. Local Context	15
4. The River Colne Pilot	16
4.1. Pilot Overview: Aims and Objectives	16
4.2. Methodology	16
4.3 Pilot Case Study: The River Colne	18
5. Findings (1): Priorities for the River Colne	20
5.1. Perceptions of the current state of the River Colne and CCC's BGI approach 5.1.1 – Existing GI approach	20
5.1.2 – Perceptions of the state of the River Colne	
5.2. New BGI approach	
5.2.1 Protecting existing BGI assets5.2.2 Enhancing and restoring local BGI assets	
5.2.3 Creating new BGI assets	29
5.3 Potential conflicts and alternative knowledges	
5.4. Summary of Key Findings and Recommendations	
6. Findings (2): Reflections on Participation	
6.1. Overview of Participants	
6.2. Participant Perceptions of Other Workshop Participants	
6.3. Perceptions of the Benefits and Challenges of Participation	
6.4. Perceptions of the participatory approach taken in the focus group discussions .	
6.5. Talk and Action	
6.6. Summary of Key Points and Conclusions	
7. Findings (3) Participatory Approaches for the Future Development of the BGI	
7. Findings (5) Furticipatory Approaches for the Future Development of the BGI ,	0.
7.1. Building Partnerships	
7.1.1. Development of a Partnership Group	48
7.1.2. Future Stakeholder focus group discussions7.1.3. Management of the River Colne	

7.2. Coproduction of Knowledge: Participatory Community Mapping	56
7.3. Citizen Engagement	58
7.3.1 Championing Community-Led Projects as Co-Production	
7.3.2. Identify Climate-Sensitive Participatory Budgeting (PB) Opportunities	59
7.3.3. Education and Communication	60
8. Conclusion	63
References	64
Project team bios	68

Abbreviations

CCC	Colchester City Council
EBS	Essex Business School
ECC	Essex County Council
BGI	Blue and Green Infrastructure
GI	Green Infrastructure
PB	Participatory Budgeting
PG	Participatory Governance
SDG	Sustainable Development Goals

Acknowledgements

The research team are thankful to all the individuals who participated in this study for their time and insightful comments and feedback during the focus groups discussions and interviews. We are also grateful to the Colchester City Council (formerly Colchester Borough Council) for the fruitful partnership that yielded immense insights and learning concerning ways in which the variety of BGI resources within the river Colne valley can be effectively managed towards improving people's health and wellbeing, as well as preserving environmental quality and promoting economic prospects across the city. We are also deeply indebted to Rosa Tanfield and her entire team in the Neighbourhood Services and Sustainability departments for their contribution towards the planning and execution of this study. Lastly, the research team is immensely grateful to the University of Essex for availing financial support, from its Priority Challenges Project Fund, which has made it possible to conduct this research project.

1. Introduction

This report examines the first stage in the design of a new Blue and Green Infrastructure (BGI) Strategy for Colchester city. Closely connected to 'green infrastructure', **BGI refers to an integrated approach to managing, improving and/or reintroducing natural and semi-natural green (vegetation) and blue (waterways) spaces.** Whilst we are used to thinking about 'grey' infrastructure, BGI moves our focus to nature-based features situated in built-up areas. Types of blue-green infrastructure include green roofs and walls, parks, cemeteries, private gardens, allotments, verges, greenways, forests, grasslands, wetlands, rivers, lakes, and ponds. Blue-green infrastructure is important for climate change mitigation and adaptation, promoting biodiversity, human health and wellbeing, and developing prosperous communities (Brown and Mijic, 2019; Natural England, 2022a).

The new BGI strategy will replace Colchester City Council's (CCC) existing Green Infrastructure (GI) Strategy (CCC, 2011). There have been a number of contextual changes since the publication of the previous strategy. In particular, following the declaration of a Climate Emergency in 2019, 'Tackling the climate emergency and leading sustainability' has become one of CCC's key strategic themes. The proposed strategy will also build on lessons learnt during the Covid-19 pandemic, for instance with regard to CCC's core priorities and people's changing relationship with nature. At the same time, the strategy will need to respond to policy changes at national and regional levels, such as the 'biodiversity net gain' principle to be introduced by the Environment Act 2021, and the introduction of a new GI framework and standards for Essex (ECC, 2020; 2022).

In order to realise the potential of a BGI, the **importance of participation is well established**. In their GI guidelines, national bodies such as Natural England and regional bodies including Essex County Council (ECC, 2020) emphasise the importance of forging sustainable partnerships with key stakeholders and promoting widespread community engagement. This is considered a key factor in **ensuring the success of projects by understanding and building user needs into designs, integrating local knowledges, resolving conflict and achieving local buy in and ownership. Nevertheless, despite the acknowledgement of the importance of participation and engagement in working with BGI, guidelines remain typically incomplete and ways to effectively manage the process are often poorly understood (Everett et al, 2021).** This pilot emerged from prior collaboration and knowledge-exchange between Essex Business School and Colchester City Council on Participatory Budgeting (PB), particularly in relation to achieving net zero. Inspired by PB and Participatory Governance (PG) more broadly, **the aim was to examine potential participatory approaches to guide the development of the new BGI strategy.** Research is evolving towards investigating the potentials of using PB specifically for greening cities (Cabannes, 2020), but there has so far been little active adoption of PB approaches in GI and BGI projects.

The pilot focused on one particular blue-green area: the River Colne, which runs throughout the heart of the City. Funding was secured from the University of Essex's Priority Challenges Fund. In line with participatory approaches, stakeholders were brought in from the outset (Reed, 2008) at two workshops held in June and July 2022 at Essex Business School. The aims of the workshops were to **identify stakeholders' key priorities for the River Colne** and to **identify mechanisms to shift from consultation to co-production of the strategy**. Interviews were conducted with four CCC employees before and after the workshops and a further eight interviews were conducted with participants to reflect on the workshops.

This report offers insights regarding how CCC can leverage participatory-driven, multistakeholder-oriented co-production of the new BGI strategy. In particular, it presents three key findings:

- An **outline of priority areas for the river Colne** identified by participants for the future city-wide BGI strategy. The analysis discussed in this report could be used as a starting point for further participant deliberations in the ongoing strategy work
- A detailed evaluation of the benefits and limitations of the participatory approach taken, including identifying areas where further work needs to be done to identify, engage and empower stakeholders, communities and citizens.
- A **framework of participatory approaches** which could be used at different phases of the ongoing development of the BGI strategy.

In the next three chapters we present the background of the study: the benefits of BGI and the central role of participation; the national, regional and local policy contexts; and the methodology of the pilot study including an introduction to the Colne case study. In the second

half of the report, we move to the key findings of the pilot. In chapter five, we analyse the key priorities identified by stakeholder participants for a new BGI strategy for the river Colne. In chapter six, we present an analysis of participant reflections on their experiences of participation during the pilot. Finally, in chapter seven, we develop a series of possible participatory approaches to the future development of the BGI strategy.

2. A New Blue Green Infrastructure Strategy for Colchester City

2. 1. Why BGI?

BGI refers to an integrated approach to **managing, improving and/or reintroducing natural and semi-natural green (vegetation) and blue (waterways) spaces**. BGI is closely connected to the concept of 'green infrastructure', recognising that consideration of the 'green' has always involved concern for the 'blue' (Everett et al, 2021). For instance, the National Planning Policy Framework (Ministry of Housing, Communities and Local Government, 2021) and Natural England (2022a) offer the following definition:

Green Infrastructure (GI) is a network of multi-functional green and blue spaces and other natural features, urban and rural, which is capable of delivering a wide range of environmental, economic, health and wellbeing benefits for nature, climate, local and wider communities and prosperity

The growing **risk of flooding** resulting from climate change and exacerbated by increased urbanisation, is one reason for more systematically integrating the blue into GI, recognising these risks can be mitigated by producing a more naturally-oriented water cycle.

Broadly, BGI has four key benefits: **promoting biodiversity; mitigating and adapting to climate change; human health and well-being; and creating prosperous communities** (Natural England, 2022a). These translate into a wide variety of environmental, social and economic benefits (ECC, 2020, p. 37). Significantly, studies show that disadvantaged communities are most likely to have restricted access to BGI and associated ecological service benefits.

BGI provides a variety of different values (Gómez-Baggethun and Barton, 2013). Firstly, they provide **economic value**, although this is often overseen in budgets and planning. For instance, the lack of balance in the ecosystem may lead to undesirable outcomes, such as a rise in temperatures emanating from a lack of urban vegetation, or increased health costs resulting from poor air quality. Secondly, BGI can increase resilience to shocks such as flooding, thereby providing a form of **'insurance value'**. Finally, BGI provides a range of **socio-cultural values** including place values, sense of community and identity, physical and mental health, social

cohesion and educational values. For instance, studies have shown that BGI can increase community cohesion and, if well maintained, decrease crime (Nieuwenhuijsen, 2021). Given that the initial costs of BGI projects could be substantial, it is important to capture the multifunctional values offered. This can be captured through **systems-thinking to map the many benefits accrued** across different sectors recognising its true values (Brown and Mijic, 2019).

By taking a thoughtful, evidence-informed, strategic approach, the multiple benefits of BGI can be maximised. According to Natural England (2022) good green infrastructure has five key characteristics. It is:

- Multifunctional Whilst traditional grey infrastructure typically has one key function, BGI offers a range of functions. For example, increased tree coverage may provide flood protection, reduce heat, promote biodiversity, and provide aesthetic value, just to name a few.
- 2) Varied –Varying green and blue spaces is particularly important for wildlife in the context of a changing climate and has a positive impact on human health.
- Connected Promoting connectivity addresses the fragmentation of existing BGI, enabling the movement of people and wildlife through green networks and strengthening resilience. Many benefits of BGI can only be realized by an interconnected network (Ghofrani et al, 2017).
- 4) Accessible For people to experience and (re-)connect with nature, BGI must be inclusive, safe, welcoming, well-managed and accessible for all.
- 5) Responding to a local **area's character** An area's natural, historical and cultural landscape makes a place distinctive and helps people recognise and connect to their local environment. GI should preserve and maintain the existing character of an area and enhance it by strengthening existing characteristics.

Notably, all of these aspects were expressed during participant discussions and reflections during the pilot.

2.2. BGI, Partnership and Participation

Studies invariably show that participation is essential for BGI. Indeed, Natural England's (2022) first principle behind good green infrastructure is 'Partnership and Vision'. Strategists are advised to:

Work in partnership, and collaborate with stakeholders from the outset to co-plan, develop and deliver a vision for GI in the area. Engage a **diverse and inclusive range** of **people and organisations** including citizens, local authorities, developers, communities, green space managers, environmental, health, climate, transport and business representatives.

The multifunctional nature of GI means that to be successfully planned, delivered, used and maintained, **many partners, stakeholders and recipients** of the benefits of GI should be involved. ... **Collaboration and co-design** can build trust and bring integrated outcomes across social, environmental and economic agendas.

Partnerships and wider engagements are also emphasised in the Essex GI Strategy (ECC, 2020). Working in partnership with a wide variety of organisations:

will help to achieve a **coordinated**, **cross boundary and inter agency approach** to the delivery of green infrastructure across the county and beyond... [It is] equally important to ensure the green infrastructure is **valued by people** is to seek **input and involvement**, from local communities to tap into their local knowledge and give them a chance to **shape the design**. Green infrastructure is all about 'place making', in which the **communities are their true owners**.' (p. 108)

Studies also suggest there are specific reasons for participation in BGI projects (Everett et al, 2021). Firstly, there may be more **community resistance** to BGI, connected with concerns surrounding water-related health and safety issues, concerns about neighbourhoods losing valued green space to water, perceptions of low-cost effectiveness, or concerns about costs, including long term management responsibilities and costs. Secondly, since BGI can be **highly technical**, the multiple benefits it offers nearby communities may not always be well understood by those communities unless there is scope for participation.

At the same time, there are **potential dangers** in using participatory methods if managed poorly. Participation may reinforce existing power structures, inequalities or discourage minority perspectives from being expressed. Participation fatigue may quickly occur if processes are poorly run or if the credibility of the process is put into doubt; leading to often-remarked concerns that participatory methods are merely ceremonial. There is also a risk that participatory processes can be perceived as 'talking' shops that work to delay action (Reed, 2008). The risks are heightened in relation to BGI, since guidelines are typically incomplete and ways to effectively manage a relatively complex process can often be poorly understood (Everett et al, 2021).

This project was therefore designed to generate an enhanced understanding of how to maximise the benefits of participation in conceptualising, co-designing, delivering and monitoring a new BGI strategy.

2.3. Participatory Budgeting

Emerging from a prior knowledge-exchange project between CCC and EBS, the River Colne pilot was inspired and informed by PB approaches. PB was initially developed in Porto Alegre, Brazil in 1989, as a 'pro-poor' mechanism delineating the potential of allocating scarce resources at the grass-roots levels more inclusively and effectively (see e.g., Lassou et al., 2021; Manes-Rossi et al., 2021). The underlying idea behind PB is to **enable the engagement of multiple actors, including beneficiaries, in the selection, design and execution of projects and programmes that deliver outputs and results relevant to grassroots needs (Grillos, 2017; Wampler, 2007).**

Several benefits of PB have been outlined, including **building a sense of community**, **fostering the feeling of being a good citizen**, **discharging civic responsibilities and enhancing the democratic values**, **knowledge and skills of key stakeholders**, particularly politicians and bureaucrats (Hong and Cho, 2018; Fung, 2006). In western democracies, the adoption of PB has been linked to political emancipation and the revitalisation of local democracy. It has been envisaged as a tool through which to articulate a deliberative or participative form of democracy, in which citizens have opportunities to partake in local authority decision-making processes and have a say on issues that impact directly on their

wellbeing (Burns et al., 1994; Fung, 2006; Flinders and Dommett, 2013; Ariely, 2013; Tholen, 2015; Shah, 2007). The adoption of PB could **mitigate the wrath of the citizenry**, that can lead to increasing distrust of the representative democracy (Michels and De Graaf, 2010).

Existing work unfolds the experience of a large number of local governments that have adopted PB in the last decades (Bartocci et al., 2022). For instance, in a study of PB in UK local governments, Brun-Martos and Lapsley (2017) found that **PB has the potential to further improve democratic accountability and city management through the enhancement of transparency.** Ahrens and Ferry's (2015) study examines Newcastle City Council's political decision to involve grassroots groups and citizens in the budgeting process following large budget cuts, to make citizens aware of the changing financial situation of the council. Citizens' awareness has been claimed to be of paramount importance to rebuild political trust.

However, studies have also identified how PB processes can be limited. For example, where local politicians, bureaucrats and elites have deployed PB to advance their personal objectives, PB has failure to genuinely serve the citizens (Ebdon and Franklin, 2006). A lack of technical and analytical skills amongst politicians and citizens can lead to the domination of technical experts, limiting the capacity of citizens to influence the budget (Célérierand Botey, 2015; Fung, 2006; Gusmano, 2013; Lowndes and Wilson, 2001; Lyon, 2000; Hong, 2015; Musso et al., 2011; Wampler, 2007). In these cases, PB can become a mere consultative process and legitimacy tool, with no direct consequences for the final budget (Lapsley, 2008; Bräutigam, 2004; Adams, 2004).

Studies have highlighted a number of prerequisites for the successful implementation of PB. For instance, in their study of PB in Italian local governments, Barbera et al. (2016) outlined four conditions that could play an important role in the successful implementation of PB: **responsiveness, representation, inclusiveness and interaction.** Similarly, Rossmann and Shahahan (2011) emphasise the importance of **promoting openness and inclusiveness** for the successful implementation of PB process. In more recent work, PB has been envisaged as a form of **co-planning, co-design and co-production and shows that citizens and beneficiaries need to be brought to the forefront of the process** (Bartocci et al., 2022).

3. Policy Contexts

3.1. National context

The National Planning Policy Framework (Ministry of Housing, Communities and Local Government, 2021) requires strategic polices to **'make sufficient provision for conservation and enhancement of the natural, built and historic environment, including landscapes and green infrastructure**' (§20d) alongside housing, grey infrastructure and community facilities. GI should be considered in planning new developments, particularly in vulnerable areas (§153), reducing the causes and impacts of flooding (§161c) achieving healthy, inclusive and safe places (§92) and improving air quality (§186).

From November 2023, this will be supplemented by the **Biodiversity Net Gain**, which will need to be built into all planning (Natural England, 2022b). This is a requirement of the **new Environment Bill** (2021), enacting the Government's 25-year plan to improve the environment (HM Government, 2018) which set a minimum requirement for a 10% net gain for biodiversity for new development. A consultation on metrics for calculating biodiversity gain/loss was conducted in early 2022.

Another key policy in the Environment Act (2021) is the development of a **Nature Recovery Network (NRN)**. This aims to provide '500,000 hectares of additional wildlife habitat, more effectively linking existing protected sites and landscapes, as well as urban green and blue infrastructure.' (HM Government, 2018, p. 58) Local Nature Recovery Strategies are tools designed to drive more coordinated, practical and focussed action to help nature and establish the NRN.

Other relevant aspects of the new legislation include:

- Introducing new **farming rules** for efficient water (HM Government, 2018, p.38) and fertilisers use (ibid., p.39)
- Promoting Natural Flood Management, supported by natural flood management funding (ibid., p. 52)
- **Promoting health and wellbeing through the natural environment**, particularly for those without access a private garden (ibid., p. 74)

- Creating more green infrastructure (ibid., p. 77)
- Supporting larger scale woodland creation (ibid., p. 48) and planting more trees in and around cities (ibid., p. 78).
- Reducing the impact of **wastewater** (ibid., p. 96)
- **Minimising the risk of chemicals** in water, including working with Water Companies and agriculture to reduce pollution and harmful pesticides (ibid., 102)
- Promoting opportunities for the **reintroduction of native species** (ibid., p.61)

A well-developed local BGI strategy will be one way to meet these new national objectives. In turn, resources and funding opportunities may be made available for realising local ambitions.

3.2. Regional Context

A key regional text is the Essex Green Infrastructure Strategy (ECC, 2020) and Technical Standards (ECC, 2022) which set out the vision to:

protect, develop and enhance a high quality connected green infrastructure network that extends from our city and town centres, and urban areas to the countryside and coast and which is self-sustaining and is designed for people and wildlife... [GI] is an enabler of better social, economic and environmental outcomes.' (ECC, 2020, p. 13).

The priorities identified during the pilot for the Colne map well onto the Essex GI Strategy objectives, as will be explored in section 5.2 below.

Significantly for the River Colne pilot, the Essex Climate Action Commission (2021) has identified the river catchment of the Colne as a **Climate Focus Area** (**CFA**). This is a particular geographical region where a focused effort can be made to combat climate change, leading the way for the rest of Essex to follow. Targeting a designated area allows for more focused, ambitious and intensive action within a shorter time frame and new learning can quickly be disseminated across the county. The objectives of the Climate Focus Area are:

• To achieve net zero carbon as quickly as possible, focussing funding, partnership and energy in a single area.

- To recover biodiversity and natural ecosystems by actioning radical changes in land use practice with a focus on nature-based solutions and an ecosystem approach.
- To be a Pathfinder and Pilot area, where lessons will be learnt quickly, and the acquired knowledge will be shared with the rest of Essex.

3.3. Local Context

There have been significant changes to the local city context in recent years. Since CCC's declaration of a **Climate Emergency in 2019**, sustainability has become one of the Council's key strategic themes and steps have been taken to develop a Climate Emergency Action Plan (CCC, 2021a). The new BGI strategy is being developed under the strategic themes of 'Tackling the climate emergency and leading sustainability' and 'Creating safe, healthy and active communities.' The strategy needs to reflect **organisational priorities**, which CCC participants suggest are better understood in the post-pandemic context (Participant 8) as well as the ways **citizens re-evaluated and re-valued their relationship with the natural environment following the pandemic** (ONS, 2021).

Whilst CCC staff typically reported using more traditional consultation methods in engagement processes, there was enthusiasm to experiment with more innovative forms of participation, better reflecting the Council's 'Communities Can' approach. One key driver were the learnings derived from the ongoing Woodland and Biodiversity Project (Participant 8; CCC, 2021b). Community environmental activists objected to the project's original tree planting ambitions, arguing instead for a nuanced approach that takes into account the value of existing grasslands and wetlands for biodiversity and carbon sequestration. In contrast to the approach taken at the beginning of the Woodland and Biodiversity project, the BGI strategy development sought to engage stakeholders from the very outset through the River Colne pilot.

4. The River Colne Pilot

4.1. Pilot Overview: Aims and Objectives

Creating a new BGI strategy is foreseen as an 18-24 month project, of which the River Colne pilot constituted the first stage. To appropriately limit the scope of the pilot, the decision was taken to **focus on the blue-green spaces around the Colne**. The aim was to enact a participatory approach to strategy development, inspired by PB and PG approaches. Following best practice (ECC, 2022; Natural England, 2022; Reed 2008) and enabled by the University of Essex's Priority Challenges Funding, key stakeholders were involved from the outset.

4.2. Methodology

This study employed a mix of data sources including key documents, workshops, questionnaires, and in-depth semi-structured interviews. At the first stage, the EBS team **collated relevant publications for analysis**, supported by recommendations and insights from CCC colleagues. These included publications by CCC, ECC, other UK local government authorities, neighbourhood plans, and national policy documents. A content analysis of these documents was completed to provide insight into the range of BGI assets that exist along the Colne River valley, national and regional approaches to BGI, as well as the main challenges affecting BGI assets.

At the next stage, **workshops were conducted with key stakeholders and organisational representatives** involved in the management, regulation and commercial and non-commercial utilisation of BGI assets along the river Colne. Stakeholders were identified in collaboration with CCC and ECC, and invitations were sent out and managed by CCC. The workshops were held in-person at Essex Business School in June and July 2022. Many participants commented favourably on the location of the workshops for providing a less political context than Councilowned premises. Essex Business School is also helpfully located in close proximity to the river.

The workshops were co-designed and co-delivered by the EBS and CCC teams. They were organised into two separate discussion sessions, both of which were held twice (once during the day and once during the evening) to promote greater inclusivity. In the first sessions, participants were invited to discuss priorities for the new BGI strategy organised around three

key thematic areas: social considerations, environmental issues and economic benefits. During the second sessions, which took place the subsequent week, participants discussed participatory mechanisms for co-producing the BGI strategy by taking a deeper dive into one group-selected 'project'. Participants were organised into discussion groups of 4 to 6 people and materials produced by the groups were collected and analysed. During the workshops, observations were also made by members of the research team. In total over 30 participants took part in the workshops, with the majority attending both sessions.

After the first workshop, participants were invited to complete a **pulse survey** designed to generate additional insights concerning their attitudes to existing BGI within Colchester city, as well as their experience of participating. Sixteen responses were received by the project research team (i.e., approximately 32% survey response rate). The survey responses were also useful in discerning participants' perceptions and experiences of co-creating policies intended to assist CCC in realising its net zero carbon goals.

The last data collection process involved **12 in-depth interviews with key stakeholders** involved in the conservation, management and utilisation of BGI assets along the river Colne in Colchester city. This included 4 interviews with CCC representatives, with three taking place prior to, and one following, the workshops. Interviews with workshop participants took place on a voluntary basis in July 2022 and followed an interview questionnaire that was organised around five main themes: interviewee background; BGI issues in Colchester; reflections regarding workshop discussions; previous participation in CCC consultations; and views on citizen coproduction.

To produce the final report, a thematic analysis method was used to analyse the interview data, survey responses and workshop observations. The analysis process yielded three key sets of findings: priorities for the river Colne, participants' experience of participating in the focus group discussions, and participatory framework for the development of the BGI Strategy. These are elaborated in Chapters 5, 6 and 7 of this report.

4.3 Pilot Case Study: The River Colne

The river Colne rises at Steeple Bumpstead in Braintree district and flows southeast through Halstead and Wakes Colne to Colchester, where it becomes tidal before joining the Blackwater Estuary. The headwaters of the catchment, north-west of Colchester town are predominantly rural in nature, giving way to a more urban environment downstream at the town itself. Whilst the Colne is only one example of the many blue-green spaces within the city, it was chosen as a **useful and diverse geographical focus for the pilot.**

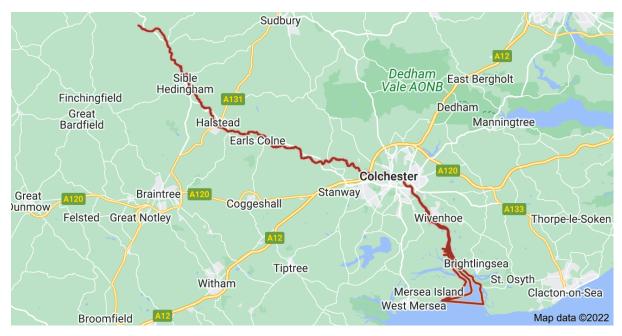


Figure 1: River Colne (Source: Google Maps)

Within Colchester city, the river has three distinctive character zones: the upper, mid and lower Colne.

Upper Colne (Rural River): In this stretch, the river flows through a rural landscape from west of Wakes Colne for about 9km until it reaches the A12 and the outskirts of urban Colchester. This countryside is important for its natural and historic environment, as well as providing the attractive landscape setting for both local villages and rural communities. It also provides important agricultural, tourism and recreational opportunities.

Urban River (Mid-Colne): In Colchester town itself, the rich historic environment and river landscapes provide the basis for visitor attractions, as well as enhancing the quality of life for

residents. Through the town, the river forms a natural corridor and amenity and there are riverside walking and cycle routes linking the Town Centre with Wivenhoe and Rowhedge. Surveys show there is rich biodiversity in urban blue-green spaces within Colchester.

The town centre is also the key focus for development opportunities and challenges, including on the riverside. The Hythe area, to the east of the town, is a former commercial harbour which includes some rundown and underused industrial land in East Colchester. In the past few years, the eastern area of Colchester has experienced a period of significant change and growth. The area provides good access to Hythe Station but much of the Hythe area is in flood zone 3 and the river can form a barrier to movement.

Colne Estuary (Lower Colne): The open character of the Colne estuary is largely an undeveloped and rural landscape with rich, diverse and irreplaceable natural assets in terms of its natural and cultural heritage. The ecological importance of the Colne Estuary is reflected by the variety of international and European designations covering them, including Ramsar sites, Special Protection Areas (SPA) and the Essex Estuaries Special Area of Conservation (SAC). The Colne Estuary is also protected as part of the larger Colne, Blackwater, Roach and Crouch Marine Conservation Zone. There are several Sites of Special Scientific Interest and Local Wildlife Sites designated around the estuary. The river's estuary is home to several sizeable communities and visitor destinations in Rowhedge and Wivenhoe, extending round to coastal communities such as Brightlingsea and West Mersea, which is world-famous for its oyster cultivation. A new coastal path is currently being planned by Natural England around the whole of England's coastline which includes the edge of the Colne estuary.

Climate change, including sea level rise presents increasing pressure on the management of estuary habitats and coastal communities along the Colne estuary fringe. The Coastal Protection Belt which covers some of the lower estuary, is designed to shape which developments can be accommodated in these sensitive environments.

5. Findings (1): Priorities for the River Colne

This chapter presents the first set of findings from the pilot: participants' key priorities for a future BGI-approach to the river Colne. These are the results of an analysis of data collected during workshop discussions, participant interviews and from the survey results.

5.1. Perceptions of the current state of the River Colne and CCC's BGI approach

5.1.1 – Existing GI approach

Several participants in the pilot had been involved in consultations that led to the development of CCC's existing GI Strategy (CCC 2011). The participants expressed satisfaction with the Council's consultative approach, including its focus and contents. However, there was a widely held view amongst participants that there has been **a lack of proactive implementation of the 2011 GI strategy**. For example, participants explained that:

"[...] we participated in the formation of the previous green infrastructure strategy in 2011. So, we put a lot of input into that and I think probably felt that it just went onto a shelf and didn't have any effect on planning at all, that's the impression we have. I might be misjudging things" (Participant 1)

"[...] I was interested that there was reference made, early on, I think to the 2011 Green Infrastructure Plan. And there is a part of me that asks myself, what became of that?" (Participant 4)

"[...] about ten years ago...I was invited to be part of the [City] Council Green Infrastructure, two stakeholder days, which were really exciting. They were led really well. But most of that just didn't happen" (Participant 2)

Some participants suggested that various challenges currently confronting green spaces across the city, such as pollution and a lack of connectivity between different ecological areas, could have been meaningfully addressed had a full operationalisation of the 2011 GI strategy been realised. This view was also echoed by CCC employees who observed that the 2011 GI strategy

lacked proper integration within other council policies and strategies, thus limiting its actionability:

"I must admit I knew of the Green Infrastructure Plan but [...] I don't think it was very relevant to the work that I was doing over the years...I think success would be tying in with other policies and strategies as well" (Participant 11)¹

The existing GI strategy is therefore considered largely ineffectual and to have not delivered the desired results, a position shared unequivocally by all the participants involved in this study. There was a strongly held view that the present state of green infrastructure across the city could potentially be better had the previous GI strategy been implemented. Perhaps as a result, the participants further expressed **a strong desire for action to emerge** from the new strategy in order for the Council to be able to safeguard existing BGI assets under its oversight as well as realise its net zero aspirations.²

5.1.2 - Perceptions of the state of the River Colne

The participants in this study comprised stakeholder groups that interact with the river Colne in various ways, including through social and leisure pursuits, commercial utilisation, and conservation of the river valley. The accounts of the majority of participants involved in both the interviews and workshop discussions illustrated **a strong and deep connection with the river**. Many of the participants have interacted with the river over a long period of time, with participants 12 and 5, respectively, approaching 40 and 50 years of close relationship with the river.

The diverse backgrounds of the study participants especially benefited the presented study by providing multifaceted perspectives concerning the state of the river Colne. Firstly, the participants generally depicted a **sceptical attitude concerning the health of the river** and the surrounding ecosystem. In particular, one of the main concerns raised by participants pertains to the river's contamination by **sewage** as depicted in the quotes below:

¹ The importance of mainstreaming and integrating a GI approach across an authority's work is the first principle of the recent Essex Green Infrastructure Standards (ECC, 2022, pp. 12-21).

² See more on participants' desires for action in section 6.5 below.

"...sewage [...] is a serious problem...I don't know why the sewage companies were allowed to put sewage in the water and why their treatment plants are not efficient enough to treat all of the sewage..." (Participant 5)

"We could do all sorts of lovely environmental projects along the river corridor. But [...] if we've still got raw sewage going into the river, you can't have a total ecology, healthy ecology in that river valley, if that's happening. That's an essential, isn't it?" (Participant 7)

"The river stinks sometimes...It is clearly coming from the sewage fall-out at the Hythe. Would I swim in the river? On a rising tide, I might on a hot day, but I never have in 30 years of living here...It could be better. The fact that stinking sewage run-off found its way into the river as a standard procedure is pretty dreadful [...] it comes back to this question of normalising. I've never known the river any different" (Participant 12)

Besides detrimental environmental consequences, the state of the river was considered to be a deterrent to potential users, such as swimmers who might fear swimming in contaminated water. Other participants also suggested that unpleasant smells coming from the river could discourage riverside walking and users of cycle routes along the river valley, thus counteracting the Council's efforts to promote sustainable travel across the city. The need for a multi-stakeholder approach to resolving the sewage issue, including the role of water companies, was raised during the workshops.

The participants also identified **weeds and silt in the river as major impediments to wildlife navigation and human access.** Several participants attributed sewage and nutrient loading from agricultural runoff as the main catalysts fuelling the growth of weeds:

"Pollution is the biggest thing I think for improvement of rivers because that would take into account the farm pollution as well with silt and, well not necessarily pesticides but nutrients now. They get in the river and they make things grow more than what they should do... to sum it up I suppose it's silt-cum-mud that needs to be removed and the sewage and the nutrients. So, there are those three aspects I think of pollution..." (Participant 5) Concerns were raised during the interviews and workshops that the presence of weeds in the river posed significant threat to fish, due to oxygen deprivation in the water especially in sections where weeds grow in large numbers. It was also observed that participants who use the river for leisure, including paddling and canoeing, find it challenging to navigate sections of the river that are infested with weeds. Some participants noted that some sections of the river need to be desilted in order to make the river more navigable for various watercraft users:

"In some sections of the river, siltation is a real issue in all of these places. Whether the solution is to completely un-silt the place, that's again a decision for others [especially the local parish Councils]. So, there needs to be some sort of silt management system in place..." (Participant 3)

In general, participants narratives pointed to a need for a more **proactive river management strategy** that can help to enhance the state of the river for nature and human users, and attract various users, including walkers, swimmers, and other watercraft users who may wish to use the river for sporting and leisure reasons.³ Participants did acknowledge efforts by the Environmental Agency in clearing weeds from the river, but the overall opinion was that this needs to be done more frequently and along the entire stretch of the river.

Another common theme amongst participants was that the Council should look for ways of **working with landowners and the farming community**, in order to identify ways in which the challenge of nutrient loading into the river could be addressed:

"I think the farming community is just so crucial in all of this. They're probably the most important people. After the planners, after the council's planning department, they are probably the most important people in all of this, to be frank, because they're the ones who are upstream and they're the ones who dominate the landscape and the riverscape." (Participant 12)

However, whilst all participants acknowledged problems with the river, representatives of environmental organisations generally **depicted a more favourable view** of the river's state.

³ For more on proactive river management, see section 7.1.3 below.

The latter participants noted that the river has a rich diversity of wildlife including fish, birds, otters among other species. This fits with observations during the workshops, where several participants suggested that future BGI strategy should start by valuing the already existing BGI assets around the city.⁴



5.2. New BGI approach

Image 1: Participant-generated notes and illustrations produced at Workshop 1.

During the pilot, participants called for a multifaceted BGI policy framework that simultaneously addresses social, environmental and economic needs and priorities. Underpinning participant discussions we identified **four key principles** around which participants exhibited considerable consensus in the workshops. These were:

• To consider the river Colne valley as a continuous corridor

⁴ See more on developing an approach which starts with existing BGI assets in sections 5.2.1 and 7.2 below. For more on divergent participant views, see section 5.3 below.

- To consider and balance the needs of all users (nature, wildlife and diverse human needs, as well as solidarity between users upstream and downstream)
- To emphasise the importance of heritage, history, placemaking and placekeeping⁵
- To base decisions on a thorough, evidence-based understanding of existing ecological and social assets.

A number of **long-term objectives** for the new GBI strategy were frequently raised during the sessions. This included promoting environmentally-friendly commuting and active travel; developing investment opportunities which respect and balance environmental, social and economic needs; creating green job opportunities; and developing opportunities for the "right type of tourism", although there was no consensus about how this would be defined.

To achieve these long-term ambitions, participants discussed a number of 'projects' throughout the pilot.⁶ These **projects fell into four main categories**:

- **Protecting** existing BGI assets
- Enhancing and restoring local BGI assets
- Creating new BGI assets for wildlife and human users
- Promoting connectivity for nature and all human users

These themes emerged inductively from the analysis of the pilot data, but **map closely onto the first four objectives which emerged in the Essex GI strategy**, see figure below (ECC, 2020). It is important to note that the other three ECC objectives were also present in our data, but have not been included here for different reasons. Firstly, in our pilot, 'inclusivity' was discussed primarily in relation to 'connectivity and access' and these discussions were therefore integrated. Secondly, the benefit of BGI to human health was widely assumed during the pilot but featured less prominently as an explicit theme in its own right. Finally, although the importance of securing sustainable funding through partnerships was a frequently-

⁵ Many thanks to an anonymous participant for emphasising the importance of placekeeping during a review of this report. This term refers to long term stewardship and the ways BGI assets are managed and maintained. The importance of placekeeping was raised during the workshops, reflecting concerns that long-term maintenance costs are often insufficiently taken into account, leading many BGI projects not to be realised. The importance of placekeeping is also emphasised in the Essex GI Strategy (ECC, 2020).

⁶ There was some disagreement about using 'projects' as a framework for discussions, as some considered this to already shoehorn the strategy into a developmental paradigm. However, here the term is used broadly and includes projects which protect and restore existing assets.

discussed theme, it emerged primarily **as an enabler for all other objectives.** As such, in this report, a proposed mechanism for securing funding (a Partnership Group) is explored further in section 7.1.1 below.



Source: ECC, 2020, p. 10.

5.2.1 Protecting existing BGI assets

For some stakeholders, protecting existing assets from the harms identified above was the primary task of the new strategy. The starting point here is to fully understand and **build from existing BGI assets**. There was considerable support for this approach in the workshop where it was discussed:

"So, I would have thought the first priority would be to see our existing or I would say our remaining green and blue infrastructure. The key question is to protect what it provides us with already, not to think of new things to do with it in terms of business investment or whatever or even tourism." (Participant 1)

This points towards a need for stakeholders to explore the **relative importance** of the four objectives discussed in this section, which are typically presented as equally weighted.⁷

⁷ One participatory approach which builds on the primary importance of existing assets is discussed in 7.2 below.

There was a shared opinion amongst many participants that the **involvement of stakeholder groups** is critical in protecting BGI assets across the city:

"...the role that [stakeholder] groups...can play in bringing to attention...towards identifying the key species that we need to protect in the [city]..." (Participant 4)

Some participants were actively involved in 'citizen science' approaches. Meanwhile, many organisational representatives referred directly to the knowledge held by their institutions, which could be pooled in the development of the GBI strategy. The Roman River report (Tansley, 2019) is a good example of a published compilation of stakeholder knowledge, documenting the biodiversity on one tributary of the Colne. Another good example of the active role of stakeholder groups in BGI projects is the role played by key local organisations in redefining the Woodland and Biodiversity project.⁸

Another interviewee emphasised a need to protect **ancient woodlands** (e.g., Welsh Wood Park), which are not only irreplaceable but also an important natural heritage for the city:

"[...] it is extremely important to protect the existing ancient woodland...that is woodland that's known to have existed before 1600 AD. Now, the importance of that date is that, after that time, landscape designers started bringing other plant species into the country, which changed the ecology...So, if you've got an ancient woodland that's woodland cover on soil that goes back that far...centuries back. So, the ecology, the chemistry of the soil, it's irreplaceable. We've lost an awful lot of ancient woodland, and you can't plant ancient woodland because of the, as I say, the nature of the soil particularly, and the whole suite of biodiversity you've got there. That's why I call them the crown jewels in biodiversity... (Participant 7)

The above discussion and data excerpts illustrate a common opinion concerning the need to ensure that effective policies are developed towards protecting, not just the river Colne valley, but also all other existing BGI assets across Colchester city. This was raised as particularly urgent in relation to planning policy.

⁸ For more on the influence of the Woodland and Biodiversity Project on CCC's BGI strategy approach, see section 3.3 above.

5.2.2 Enhancing and restoring local BGI assets

Besides protection, insights from participants indicated a need to enhance the quality of BGI assets, including local ecological systems and biodiverse habitats. It was noted that population growth and climate related factors had over time exerted pressure on various BGI assets, such as water quality, green spaces and biodiversity habitats. Building on a detailed knowledge of what is already present, participants frequently suggested that efforts should be made towards **enhancement and/or restoration of such impacted BGI assets**, as illustrated below:

"I do think that we need to assess the quality of the [BGI] places that we've got, and ensure that they are restored and made as good as they possibly can be for nature..." (Participant 4)

"...basically, we're trying to persuade the council to stop mowing public areas, not completely, but in a sensible way, stop mowing public areas that don't need to be mowed so that wildflowers and insects can restore, can recover their populations" (Participant 12)

There was an intriguing and well-received proposal in one workshop that the reintroduction of the (now extinct) sturgeon fish in the Colne River, which is also critically endangered in Europe, could be a high-profile BGI campaign. This could potentially serve as a tourist attraction and contribute positively to the local economy and local conservation efforts.

Further discussions suggested a need to undertake **timely maintenance and repairs to BGI assets** and/or their support infrastructure before they deteriorate to avoid cumulative negative impact on river Colne or other biodiversity areas. For instance, one participant added that:

"I'm particularly worries because in the Alresford Creek, there is a rickety timber structure that is very likely to collapse into the creek...and we had some inadequately piled pontoons just bunched up... when this eventually collapses, and it will, who's going to remove that? Rowhedge Moorings [...] also has the same problem... Then you've got the upper Colne, that's the area you'll see a lot of worse stuff here, but some of this has been dealt with by the council and, they've done a great job...there is also a

need to carefully monitor the river embankments because when they are eroded and then collapse into the water then, of course, the habitats will be damaged (Participant 3)

5.2.3 Creating new BGI assets

A third important consideration to factor in future BGI strategy entails the **creation of new BGI assets** that can help to increase the local BGI portfolio, with a view to enabling the council to realise its targeted net zero aspirations. For example, one participant proposed the creation of new woodland, arguing:

"It would especially be useful if the council can aim to create more woodlands that can help to absorb carbon and lessen impact on the environment..." (Participant 7)

The participant added that any such proposal would need rigorous consultation and to follow a policy of 'the right tree in the right place for the right reason'.

Another participant suggested that the lower Colne valley presents a significant opportunity to **create wetlands** that can further help the council to achieve its net zero goals:

"The Colne presents a massive opportunity to mitigate climate change. Water, freshwater marsh wetlands are the very, very best way to sequester carbon. It is streets ahead of grassland, which itself is streets ahead of woodland. Woodland, which is what the council tends to focus on, is the least intensive way of sequestering carbon. The river, both saltwater and fresh wetlands, is the best way to sequester carbon...And the best thing they could do from that point of view is do a lot of flooding, as simple as that. If they want to sequester carbon around the river in Colchester, go to the river, flood areas of land around it, and leave it and let it be..." (Participant 12)

It should be noted that this quotation reflects the view of just one participant and there was disagreement during the pilot about the relative merits of different land types, including woodland, for carbon sequestration. However, in general, participants agreed on the importance of taking an **informed**, evidence-based approach to existing land use, and benefitting from

the most up-to-date scientific data (e.g. Gregg et al, 2021) before introducing any land-use changes to promote carbon sequestration.

Another interviewee argued that creating new BGI assets does not necessarily mean focusing on large projects, but can also be done on **smaller available spaces** as noted below:

"Creating new green spaces can also involve leaving verges to grow wild, to create wildflower meadows, by reducing cutting regimes... (Participant 8)⁹

Enabling smaller projects may also yield quicker results, as they are typically less time- and resource-intensive and less complex to implement.

Besides creating new 'natural' assets, participants also discussed the possibility of peoplefocused (but environmentally sensitive) developments. One of the most discussed ideas at the workshop was also one of the most controversial: the **possibility of a new marina at the Hythe.** Whilst there was considerable enthusiasm amongst many participants, further discussions showed that such an initiative would entail negative outcomes, including implications for nature and the displacement of the community of boat dwellers who live in that area. It would thus be important to undertake both an evidence-based survey of potential negative environmental consequences, as well as adequate consultations with all affected parties, before implementing such a project.¹⁰

5.2.4 Connectivity

The fourth issue proposed by participants relates to **developing linkages and connectivity between blue-green spaces along and beyond the Colne River valley** which are important for safe wildlife movement and migration. The workshop discussions reiterated the need to improve the whole river environment for species including its critical role as a spawning site for fish and a habitat for migrating birds.

⁹ This particular example could also be conceived as restoring a former BGI asset, rather than creating a new one. Similarly, there is a blurred line between protecting and restoring existing BGI assets. This shows how these three broad project types should be seen as overlapping rather than mutually exclusive.

¹⁰ For more on alternative knowledges and values, see section 5.3 below.

"We have a lot of fantastic biodiversity areas which is something to be proud of considering that Britain is one of the most nature-depleted countries in Europe, if not the world...I think what needs to be done is to ensure these areas have connectivity for wildlife to be able to move around...And therefore, places like the Moors, if that can be developed or that can be integrated into the chain of greenspaces along the river, I think that that will be hugely important, along with a proper assessment of the quality of the existing spaces [...] there's a need to try to maintain the connectivity for nature, as much as possible..." (Participant 4)

"There's a need to enhance connectivity between different ecological areas...not simply planting more segregated woodlands or what we call priority habitats, which may be meadows and wood pasture...if efforts could also be made to link those things together, you create more connectivity between different habitats...You create a far better and more robust ecology...Which leads me on to think about the fact that we are experiencing climate change. So, if you have fragmented habitats, they are far more vulnerable to climate change, whereas if you have connectivity, there's wildlife movement. But also, there's more resilience... (Participant 7)

A focus on connectivity between green-blue spaces along and beyond the Colne would boost the resilience of ecosystems in the face of climate change and ecological degradation.

Connectivity for people along the river also emerged as a key theme during the pilot:

"I think there is a need to think seriously about the prospect of having greater connectivity between Colchester's different important green spaces...this would not only encourage non-motorised travel but also greatly help to celebrate those different types of terrain..." (Participant 8)

Many participants discussed a need for the council to ensure that appropriate supporting infrastructure is provided to help with safeguarding the BGI assets and to ensure that **all people can access and use the river in a safe manner**:

"I'm strongly in favour of people having access to footpaths and the appreciation of the green space, so long as it's of a kind that is consistent with maintaining the biodiversity

and peace...I wouldn't be in favour of motorised access, cycling too can be slightly problematic, particularly where you've got a very narrow green space...there ought to be ways of dealing with that either through public education and so on, or provision of different sections of footpaths or ride ways..." (Participant 1)

"Lots of people don't even realise that, that we actually have such a rich off-road network. And a lot of it is along the river. But there are real areas of disconnect and I've always just thought that's such a missed opportunity. Particularly the area, like Westwood, but before you get to Cymbeline Meadows. Then of course, there is Cymbeline Meadows where it's a little bit more difficult to walk along the river...you can if you're on your feet, but there is a disconnect, obviously, for anybody with a disability" (Participant 2)

Beyond changes to physical infrastructure, participants noted that inclusive access also requires better communication and mapping.¹¹

These discussions fit well with a widely shared long-term objective of **environmentallyfriendly commuting and active travel.** Other workshop discussions introduced ideas of connecting walking routes to other sustainable travel options, particularly the rail link from Colchester towards Walton-on-the-Naze. Participants emphasised the importance of learning from best practice in other parts of the country, which was another common workshop theme.¹²

Finally, connectivity was also discussed in relation to human river users. For example, one interviewee suggested a need to ensure that appropriate infrastructure is provided along the river itself to **prevent both environmental erosion and the risk of injury to river-users.**

"It would be useful to have portage points, in other words, jetties where you can get in and out easier. The one at East Gates is a bit more technical because you're going from fresh water to sea water. So, the seawater one has got to rise up and down with the tide...But the one at Middle Mill could be quite easily put in for, I don't know, I'm guessing £1,000 maybe, something like that for the upper and lower ones...So, it just

¹¹ For more on mapping the Colne, see section 7.3.3 below.

¹² For example, participants also recommended learning from best practice in the UK and abroad in relation to developing farming clusters and desilting.

makes it easier getting in and out of the river, and it cuts the erosion a little bit. If you've got canoes and people trundling up the bank all the time, it erodes a little bit more whereas if you've got a specific jetty and maybe a pathway, your erosion is cut down considerably" (Participant 5)

5.3 Potential conflicts and alternative knowledges

The pilot clearly demonstrated that some proposed BGI initiatives will need to be carefully considered **to avoid creating conflicts and disadvantages for certain stakeholder groups or green-blue spaces.**

For example, participants exhibited mixed views relating to potentially **restricting access to some river users in some areas.** A section of the participants stressed the need to make all BGI assets openly accessible to all Colchester city's residents and visitors. These participants argued that local BGI assets have the potential to improve people's wellbeing, when people are allowed access for non-interventionist, non-destructive leisure activities. By contrast, another group of participants proposed restricting access to certain BGI spaces and sections of the river in order to protect the environment and other vulnerable biodiversity habitats. Similar controversies may relate to the degree to which tourism is encouraged and, in particular, defining what the "right type of tourism" looks like. Stakeholder consultation and participation is therefore important to resolve potential conflicts around access to BGI areas. Significantly, with some participants reporting they had modified their initial views during the session, for example in relation to proposals to restore the old open air swimming pool.

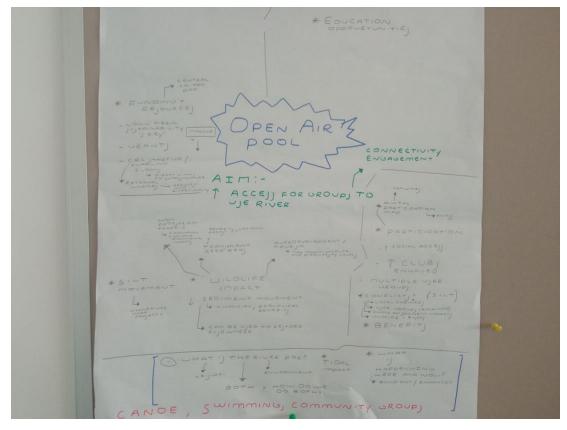


Image 2: Participant-generated materials from Workshop 2.

The disagreements over creating a new marina at the Hythe revealed not only conflicting interests, but also the **importance of different knowledges.** This gave rise to **fundamental differences in valuing existing BGI assets**. For some participants, the Hythe was considered 'the Badlands' (Participant 3), with the potential disintegration of unused or abandoned boats posing considerable financial risks. By contrast, others recognised that the **knowledge acquired through lived experience** had significantly affected their view of, and ways of valuing, the river:

...Maybe if I didn't live there, I would say, oh, yes, a marina would be so lovely. And I can imagine maybe that's what I would say. But now I've lived there, oh, no that would be so bad. But if I didn't live there, then I can imagine it seems like a great idea ... I think what we really just need to do is celebrate what we've got, celebrate the history, celebrate the wildlife that we've got. And I think within that celebration then it will lift up the area. People will see that, oh, this is a lovely place to be. It's celebrated. And I think pretending it's something it isn't, isn't a great idea either... (Participant 6)

This means that CCC will need to **balance**, actively listen to, and value different **knowledges**, including the knowledge acquired through lived experience, in its future strategy development. Exploring options for deliberation amongst participants can also enhance the quality of individual opinion-formation and may help identify and build routes towards areas of overlapping consensus (Niemeyer, 2013).

Finally, public access to some BGI areas might mean access through private land which could result in conflict with landowners. In this regard, it is important for the council to ensure that the future BGI strategy engages proactively with affected landowners. The high percentage of private land along the Colne also demonstrates the importance of **developing BGI approaches towards both public and private land**, as was also emphasised by participants in one of the workshops.

5.4. Summary of Key Findings and Recommendations

This chapter has presented three key sets of conclusions. Firstly, we considered CCC's existing GI strategy (2011) and approach to the river Colne. Whilst the content and approach to its design were largely praised by participants, there was a sense that **the strategy had not been effective or proactively implemented.** Overall participants expressed **concern about the quality** of the river Colne, particularly with respect to sewage, effluent, weeds and silt. Many expressed the need for **better river management**.

Secondly, analysis of the pilot data suggested four key areas for the new BGI approach. These are:

- **Protecting** existing BGI assets
- Enhancing and restoring local BGI assets
- Creating new BGI assets for wildlife and human users
- Promoting connectivity for nature and all human users

Importantly, these map well onto Essex County Council's (2020) GI strategy. However, it may also be important to consider further the relative importance of these objectives, particularly in a context where short-term economic needs are frequently prioritised over environmental and social objectives.

Thirdly, the workshops and interviews revealed the potential for conflicts. On the one hand, there was the possibility for conflict over **different material interests or ideological preferences**. At the same time, different knowledges, including knowledge acquired through lived experience, contributed to **different ways of viewing and valuing the river**. Significantly, deliberation in the workshops revealed at least a partial modification of initial opinions as a direct result of workshop discussions.

The BGI priorities presented here were identified through a meaningful participatory approach with key stakeholders with deep involvement in local BGI assets. We therefore propose that they may **usefully inform and/or frame future discussions around the further development of the BGI strategy.** They may also help CCC and its partners consider mechanisms for integrating different knowledges and managing future conflicts. However, it must be remembered that they only represent the initial results of the pilot project and therefore should **remain open to revision through future participatory mechanisms**. There were also important limitations with regard to participation, as will be explored in the next chapter. Finally, some of the priorities identified in this chapter require substantial capital investments, so budgetary constraints and resource availability need to be made clear to participants, to set realistic expectations from the outset. This also highlights the need to secure sustainable long-term funding, as explored in section 7.1.1. below.

Key Recommendations

- Use the findings from the pilot to inform and/or frame future strategy development, but ensure they remain open to revision through participatory mechanisms
- Value and integrate different knowledges in the development of the strategy
- Enable the expression of different perspectives, including opportunities to develop and modify existing views through education, communication and deliberation
- Actively consider how the new strategy can be effectively enacted, including through co-production and co-monitoring, and how this work can be widely communicated.

6. Findings (2): Reflections on Participation

In this chapter, we explore participant reflections on the approach taken to the participatory workshop design the first stages of the BGI strategy development.

6.1. Overview of Participants

To identify potential workshop participants, a stakeholder list was drawn up. This was done in **consultation with CCC colleagues from a number of departments**. Colleagues from a range of CCC departments and Essex County Council were also invited since BGI in general, and the River Colne in particular, crosses a wide range of functional areas. It was notable that there was an **enthusiastic response** to the invitations, with 37 individuals signing up for the first workshop and 39 for the second.

Participants were stakeholders associated with the Colne, representing a **wide range of environmental, social and economic interests**. They were mostly associated with a wide range of **professional and voluntary organisations**, although not all attended in a strictly representative capacity. Many were already well networked and typically had **existing and sometimes well-established links with CCC**. Most professionals and some volunteers typically interacted with CCC in an official or semi-official, representative capacity. Some participants reported contacting particular, named CCC staff to resolve specific problems as they arose. For example, when asked how frequently they interacted with council staff, one participant responded:

So, as and when I need them, I involve them. Sometimes that could be frequent, like I just met [employee name] yesterday, and then other times I might not see [them] for six months or a year. But there are often little things that crop up... [Participant 5]

Others engage with CCC primarily to promote community or activist-led initiatives and/or to lobby against particular CCC -led initiatives. In both cases, a **common motivation of frustration or outrage with existing policies** emerged as driving factors in building or sustaining community groups, and in the building of links with CCC.

It is therefore unsurprising that participants demonstrated a **good understanding of, and ability to navigate, local authority processes**. Many explained that this had not originally been the case. Yet all were individuals with the **confidence, pre-existing skills and knowledge and/or contacts to independently** approach the problem.

So what happened was I had no idea what to do. I really did have no idea what to do. But I've worked in public sector management long enough to know that there is somebody. There is always somebody. So I emailed the portfolio holder, the politician at the [City] council... (Participant 12)

Little old me can't do, really, anything to make that [my idea] happen, unless I can generate a network of people. (Participant 2)

It was also noticeable that volunteers were **often retired or nearing retirement**. The primary reason given was the time available to these individuals to get involved. Nonetheless, the over-representation of retired people was mentioned as a limitation by a number of participants.

It's no coincidence that a significant proportion of the people that we've got available to do stuff are retired and we are... I don't want to devalue the participation of older people, we're stakeholders and we have an interest too, but we're not necessarily representative. (Participant 1)

6.2. Participant Perceptions of Other Workshop Participants

Generally, interviewees were very positive about the diversity of participants at the focus group discussions.

I did mention to someone that I've been in this line of work for a long time. Often been people talking amongst themselves who are preaching to the converted. The event that you put together is the first time in my working life that people from your background, from an economics background, have helped drive and organise what is being considered in environmental terms... It seems a much more inclusive way of doing it... I felt very positive after these two meetings that we've had. (Participant 7)

And when I went into the room and I could see the variety of people there, and their backgrounds, I thought this is fantastic. This is really fantastic, because everybody's got different ideas. And it wasn't just people there for commercial... to make money out of something. There were lots of people there that care about nature and things like that, which I think was really important. So, I left the meeting feeling quite euphoric... Apart from the second one where I got slightly annoyed. But only because... But I also think that's quite good because I think you need those differences of opinion. (Participant 6)

The ability to **develop their own network of contacts and learn from each other** was frequently expressed as a positive outcome of the workshops. Even a participant who expressed the importance of carefully managing stakeholder engagement to get things done, reported that:

I did speak to a number of people just after we went to have lunch and things. And they were asking about different things and ... I go up and down the river but, on the water, I don't often walk up and down it and they have different experiences and no less or more important. And so, I think, yes, it was a good idea. (Participant 3)

However, there were also some reflections on the **need to diversify further**. For example:

I was pleased with the diversity of people there... Clearly it needs to be even more democratic, so I've spoken with lots of people who didn't know about it or who would have loved to be engaged with it. And so, yes, that's a huge challenge on your hands and to know how you can engage all of them. (Participant 4)

We didn't get an invite for whatever reason. It could have been mislaid. The only reason I know is I knew somebody in Essex County Council who got an invite and he said, have you been invited to this, and I went, no. So, I elbowed my way in ... To a degree I felt that some of the groups that use the river weren't that well represented (Participant 5)

Beyond river users, other groups who were considered **less well represented** were residents and other landowners, particularly farmers. Others were concerned about the absence of other powerful development interest groups on the long-term success of the strategy. But actually, whatever we talk about in these workshops, and when we get into the BGI proper, whatever we talk about or whatever we conclude, if the planners aren't there or the business people aren't there, it will always be susceptible and always vulnerable to the next big developer coming along and saying, I've got £40 million to invest in the Hythe and bring 1,500 jobs in the first year and 3,000 jobs in the second year, and they are quality jobs. And the council will just lather at the mouth. (Participant 12)

6.3. Perceptions of the Benefits and Challenges of Participation

The **need for engagement and participation was a common theme** which emerged from group discussions, particularly in the first workshop. Nonetheless, the form of such participation often remained under-explored.

There were two key reasons given in interviews for co-commissioning and co-designing BGI with communities: to produce well-designed facilities the **communities will use**; and to give a **sense of ownership** so communities help maintain facilities.

[Participation is] not the easiest route, but I think it is absolutely essential. I really do, because I've been in this line of work for 30 odd years and there have been green spaces made by a local authority... if you walk away and leave it, then there's – inevitably there can be use and abuse of it. And ownership and a sense of ownership that the community were asked, gave an input, got involved, went out on the day, and did whatever, pick up litter, physical involvement, that creates that sense of ownership. And you get more longevity, it becomes their space. And they also become the eyes and ears on the ground... you get people who will look after it, put simply. Yes. (Participant 7)

Because coming from an architect and a design background, if I don't get involved with my client first and really see what the problem is... that needs fixing. Or how to work with the community so that then when something happens, they feel like they're part of it. That they've also part created it, then they might use it instead of not involving the community. And then they're given something that actually they would never use, or something that looks nice but it's not really right for them. And so then it ends up being an empty space that is a bit of an eyesore for the local community, because they've not been involved in the process. (Participant 6)

Another participant argued that participation with organisations could **avoid conflicts** between different priorities and solve common problems at an early stage. When discussing the role of insect-friendly LED lighting which can resolve environmental issues without compromising community safety, the participant concluded that:

The role that ... [community organisations] can play in bringing to attention that, and that's why consultation needs to be ongoing and early... The partnership needs to be very thorough. And I did notice in the whole participatory budgeting philosophy this idea of co-commission, codesign, codelivery and co-assessment. I don't know that we're necessarily able to do all of that, but the co-commissioning, I thought, by identifying the key species that we need to protect in this area, and the co-assessment, are really important areas for [our organisation] to contribute to.' (Participant 4)

Nevertheless, there were a number of different considerations surrounding the **potential problems** with participation.

Firstly, one participant expressed a longer term need to carefully **define a limited** advisory role for stakeholders, particularly as the process continues. The key reasons were to ensure the efficacy of the process, particularly to avoid action being indefinitely postponed. The incompatibility of relatively intransigent participant views was also seen as a potential problem:

Simply having lots and lots of stakeholders giving their opinion in the beginning is really useful but, in the end, it may be counterproductive because not everybody can ... get their achieved aim. [Participant 3]

Secondly, there were also specific concerns about participatory approaches, particularly participatory budgeting, to environmental issues. This was primarily because of the tendency for the public to **give environmental issues lower priority**, as well as the power of non-environmental interest groups.

The one thing that worried me, though, was that in terms of the participatory budgeting side of things, is that the car lobby is always about the most powerful, I think.... The cycle path between Wivenhoe and the university was created a while ago. It's a brilliant link between the two places. But the outcry about the cost of creating a cycle path, and the relatively small number of cyclists as opposed to car users, means there will always be more people asking for parking and for roads than there will be for cycle paths. And so, I don't know how participatory budgeting will deal with the fact that green policies and environmental issues, the climate crisis, won't necessarily be popular issues. (Participant 4)

Thirdly, one participant raised concerns about the **potential risk of creating long-term disillusionment** if participation was seen to have little or no effect. In particular, the participant was concerned about a strategic plan to promote and protect green spaces not being recognised or applied in relation to planning applications. One way to mitigate this is to ensure the document is being applied, including through co-monitoring processes.

You do need to have some sort of oversight on whether it's actually being carried through. So, just ending the process when you've got a document seems to me liable to produce disillusionment rather than more participation.' (Participant 1)

Fourthly, there is a need to clarify the connection between **participatory governance and elected councillors**. As the same participant explained:

Questions arise then if the influence on policy that comes from that kind of process runs counter to what people have voted for in local elections.' (Participant 1)

Whilst electing councillors elected on a PB platform would largely avoid this conflict, for CCC it will be important to work together with, and achieve the buy-in, of councillors. The important **leadership role** of CCC in general, as well as the need for Council **boldness** were also articulated by participants, particularly in relation to leading on climate change.

It was noticeable that those with substantial activist experience were often enthusiastic about participation, but **most sceptical about implementing** it.

I think when it comes to actually making decisions, I don't think the councillors will allow other people to make decisions. It just won't happen... We are a very centralised power structure in this country, and we will give that up very, very, very grudgingly. So the best we can hope for is influence. (Participant 12)

6.4. Perceptions of the participatory approach taken in the focus group discussions

The atmosphere of the focus group discussions was considered positively:

I thought there was lots of openness. Everyone's thoughts seemed to be taken into consideration. And people that seemed a little bit confused, that was ok. It seemed very open and welcoming... I feel like I definitely got a say, yes. (Participant 6)

The decision to **hold separate focus group discussions** was always praised for helping promote reflection, build networks, and further the discussion:

I thought that perhaps having two workshops was a good idea, in that we were able to reflect on the experiences of the first one and go back with a sense of what we hadn't said the first time around, and also meet with a different group of people the second time around. So, I appreciated that. I think it was a good model going forwards. (Participant 4)

One participant expressed a recommendation to **build in even more time for deliberation** to enable participatory governance to be enacted rather than discussed or a particular participatory approach to be promoted:

I would just say, let them talk. Let's see what happens... I think the essence of it is to let the participants spend as much of the time deliberating and talking and discussing and presenting rather than, yes, trying to sway [to a particular PB approach]... (Participant 12)

6.5. Talk and Action

Across the board, regardless of participants' particular interests, there was a strong desire for action to result from the focus group discussions. There was some optimism expressed about the potential for this:

I would say that I go to many various partnership meetings ... I do hear some excellent ideas, real understanding of the issues, etc. But I do feel this, there's like a disconnect or there's not a direct connect with action. Actually, what I feel very positive about the two meetings I attended with yourselves is that I'm getting a feeling in the room that this will come to some action. (Participant 7)

Other participants, particularly those from volunteer and/or activist backgrounds, were **reserving judgement**.

I thought it was going to be a bit of a waffle shop, that people go there are waffle away for a while and then nothing actually practically is done. So, I'm waiting to see now decisions being made and actual practical things being done. (Participant 5)

There were very interesting and engaging discussions, but we remain to be convinced that the council will act on a lot of what was said there. (Participant 4)

Prior experience of inaction, including in relation to CCC's previous GI strategy (2011), were reasons for this uncertainty.¹³ Other common reasons given for inaction included the Council's overall **lack of vision and/or belief in it, the intransigence of big organisations, as well as the influence of bureaucracy and systems**. For example,

You're fighting a bureaucracy that people... where no one feels they have the responsibility to change. (Participant 3)

¹³ For more on CCC's existing GI approach (CCC, 2011), see section 5.1.1 above.

There is also some concern that the development of the **new BGI strategy itself could be used as a reason for delaying other action**. For example, one community-led initiative has already been delayed for two years due to Covid. As the participant explained:

And then recently I heard from somebody I know at the council that my drawings were on somebody's desk. And this is like nearly two years later... [They] didn't really know why [they] had the drawing packs there. I think something had been lost along the way.... [They said] we still really want to do these things. But we've got to see how the Colne Project goes.... I think there are [names] from the council that are both really interested in taking it forward. And I think they're waiting to just see how this goes...

It was just meant to be quick fix solutions Because I can see this whole project is going to take a long time. I think they've still got some funds that they had before this. So, if they could just wheel the trees in, just get the trees in. Let's make it a little bit nicer for everybody, while we're doing this whole strategy plan and things. (Participant 6)

6.6. Summary of Key Points and Conclusions

Overall, the participatory approach taken at the workshops was well received and the benefits of early and ongoing involvement between CCC and other organisations were recognised. However, several areas for further improvement were also recognised.

Firstly, whilst the diversity of participants was praised, **some stakeholder groups were less well represented**. For example, there was less representation of some groups of river users, residents, landowners, commercial interests, or disadvantaged communities. It is unclear if this is because they were uninvited or chose not to attend. It was also notable that, since a stakeholder approach was taken, workshops largely consisted of organisational representatives. **Citizens without connections to known organisations or CCC** were missing. Since retired people are more likely to be involved with voluntary organisations, **younger age groups** were under-represented. Whilst youth workers did take part, there were no youth representatives.

Secondly, whilst participants supported a participatory approach, there was **disagreement** about how participatory processes could be made most **effective**, including within the context

of climate change actions. **Scepticism** was also expressed that the Council would approve an ambitious and sustained participatory approach.

Finally, there was considerable **enthusiasm** for the River Colne pilot and for **continuing involvement** with the overarching BGI project. However, this is likely to be dependent upon perceptions of the legitimacy and efficacy of the process, and particularly upon the project delivering **demonstrable results**.

Recommendations

- Work with organisations from the outset and in an ongoing, sustained partnership to harness the benefits of their knowledge, experience, networks and contributions.
- Continue to grow and cultivate the network which began to be developed during the River Colne pilot.
- Develop a more systematic approach to future stakeholder engagement and involvement activities.
- Explicitly identify and engage under-represented groups, including developing broader citizen engagement at key stages of the project.
- Investigate a range of participation opportunities at all project phases, including conceptualisation, design, delivery and monitoring.
- Take measures to proactively enable the equal participation of all groups.
- Ensure project deliverables are identified, realised and well communicated throughout the strategy development process.
- Demonstrate and communicate an active, ongoing commitment to participation, including ensuring that other ongoing and otherwise realisable projects are not interrupted or postponed by the strategy development.

7. Findings (3) Participatory Approaches for the Future Development of the BGI Strategy

This chapter **explores approaches for co-producing the new BGI strategy, from conceptualisation and design to implementation and monitoring.** To do so, we explore a number of possible methods for enhanced stakeholder participation and citizen engagement, building on participant discussions and reflections during the pilot.

Research suggests that different participatory methods will be more effective in different situations. Indeed, selecting appropriate methods should ultimately be based on their suitability for achieving the overall project objectives (Reed, 2008). Consideration will also need to be made on how to integrate different methods. However, in all cases the **quality of the participatory process is** of key importance. Reed (2008) identifies eight key features of an effective engagement process in relation to environmental issues. These are as follows:

- 1. Ensure the process emphasises empowerment, equity, trust and learning
- 2. Consider stakeholder participation **as early as possible** in the process, potentially through acquiring seed funding
- 3. Analyse and represent stakeholders systematically.
- 4. Agree clear objectives for the process at the outset
- 5. Only select methods once objectives are clearly articulated
- 6. Make use of highly skilled facilitation
- 7. Integrate local and scientific knowledge
- 8. Institutionalise participation

Assessed against this framework, the process adopted during the pilot already demonstrates a number of positive features. In particular:

- The positive underlying philosophy to participation was praised, including direct attempts to **build positive relationships and foster mutual learning opportunities**
- Stakeholder engagement was considered as the very first step in the strategy development, facilitated through a funding opportunity.
- A wide range of relevant stakeholders were identified through a collaboration amongst CCC and ECC colleagues.

- A range of local and scientific knowledges were brought by stakeholders into discussions at the workshops.
- A partnership with university colleagues further enabled the integration of **expert knowledge**, **facilitation and a detailed analysis of the process**.

Whilst this is clearly a very positive start, ongoing attention should be paid to maintaining and enhancing the quality of whichever participatory mechanisms are eventually selected. To aid this process, initial reflections are made throughout this chapter on ensuring the quality of each of the participatory mechanisms presented here.

7.1. Building Partnerships

Partnerships are widely advocated as a positive approach for BGI.¹⁴ There was considerable enthusiasm for a partnership approach evidenced at the workshops and in follow-up interviews. Indeed, the pilot clearly demonstrated that participants are already involved in a number of largely unofficial networks working around the river Colne. For example, as one participant explained:

As you've heard I've got a lot of information about the river and if people want to do things to the river, I'm one of the sources that have used it for 40, 50 years that pretty much knows the river. And if I don't know something, I'll probably know somebody who does. (Participant 5)

As well as developing these more unofficial networks, there is also the potential to supplement these with a more formalised, institutionalised network. This section will consider three interrelated ways this may be approached.

7.1.1. Development of a Partnership Group

The establishment of a Partnership Group could be important for **knowledge sharing and social learning, including in relation to funding**. Some participants, particularly those representing national organisations, explicitly discussed the funding opportunities available to

¹⁴ For more on the importance of partnerships to BGI, see section 2.2.

them. There were also suggestions that the favourable national context at the time of the workshops meant BGI funding is relatively widely available. Indeed, by articulating a clear vision or plan for the area, further opportunities may also arise. As one participant said:

There are certain big organisations, developers who want to buy into these sorts of things. It doesn't have to come from public money, public resources... There are other ways and means and that probably needs to be communicated. And, if a project could be put together showing all the benefits, there may be a local trader or a local company or a national company who would want to see the oldest city in Great Britain doing great environmental things, and they would support it. And there are funds available that way.' (Participant 7)

One interviewee helpfully discussed a previous local partnership approach: the Colchester Green Links and Open Spaces group set up around 2010, described as a 'bringing together of representatives' although many were not there in an official representative capacity. The purpose was described as follows:

...when these funding rounds come along, and two months away is the deadline, there's no way you can get together all the permissions necessary... So you have to be obviously ready upfront for that. And I thought, well, the best way is for us to have a network so that we can all share funding opportunities, as soon as we hear them. We're not hearing too late to do something about them. And then when they do come along, we're ready firing with our ideas. We've already got preformed ideas that are looking for funding and we already know the people that we need to know and have those relationships and connections in place, to hit the ground running... (Participant 2)

There were two key learnings articulated by the participants from this prior experience. Firstly, it became difficult to keep the network going as people came and went. As people were not there in a representative capacity, there was no organisational responsibility to replace them. This points to the need to better **institutionalise participation** with clear terms of reference, organisational representatives and responsibilities. Secondly, the work of the group kept expanding and became difficult to manage. As they explained

Well, what do we do with all of this information and who's going to write it up and what actions are we going to take?' (Participant 2)

This mirrors one of the concerns articulated by council staff about the potential for the BGI project to expand. **Very clear objectives** for the BGI strategy and for any Partnership Group need to be collaboratively agreed from the outset.

Workshop feedback and interviews suggest there is already **sufficient interest and enthusiasm to establish a Partnership Group** from the network developed around the River Colne pilot. Such a group could potentially be used to co-coordinate the GI strategy work, as well as constituting one mechanism for overseeing its implementation and monitoring.

Clearly, there would still need to be a **very clear role for local authorities**, including town and parish councils within, and working with, a Partnership Group. As one participant stated:

What we have found in a very microcosmic way in the local town is that when it comes to dealing with dissent, or contention rather, people are confident of an experimental thing like we are doing if they see two things. That they're told about it on headed notepaper by the town council, and at the bottom of that letter is the name of a councillor who is leading on it. And we have found that those two things give people a lot of confidence.' (Participant 12)

Another common suggestion is for the group to **spend time directly in the blue-green spaces under discussion**. Several participants mentioned their willingness to take potential partners along the river and share their expertise and experience.

You've got to have a look at it. I'm a practical person and it's nice to waffle about it but it's even better to get on the river and go, look at that, that's what we need. Look at that. That needs to come out. Look at that, and do things. I think that's what needs to be done now going forwards with the group that we've got. It's to have some physical this is what we've done or this is what we're going to do and this is what has been done. I think if you show that you're an influential group to get stuff done, that's when the group starts to take off and people will be very interested in getting on it. (Participant 5)

Recommendations

- Use the network developed in the River Colne pilot to explore opportunities for establishing a Partnership Group
- Agree clear objectives for the group at the outset
- Institutionalise participation through allocating clear responsibilities.
- Ensure the process is **well-supported and well-resourced**, possibly through employing a project officer as suggested at the workshop
- Due to existing gaps in stakeholder and citizen representation, keep **membership opportunities open.** This is particularly the case as only the River Colne pilot has been conducted, and other blue-green spaces have not yet been examined.
- Ensure the work of the group is **transparent**, well-publicised and wellcommunicated.
- Establish a well-defined and central role for CCC within the group.
- Locate some of the group's work within blue-green spaces.

7.1.2. Future Stakeholder focus group discussions

A key intention of the River Colne pilot was to provide a test case for future workshops focusing on other blue-green spaces in Colchester city. Whilst participants and project team members recognise the approach could be **easily replicated**, there are key questions to explore in continuing to develop this approach.

One interviewee referred to a discussion on **effective participatory consultation**, which had taken place during the workshop.

And I found that interesting, that discussion, actually, just talking about if you genuinely have a participatory consultation process, how big do you start and then how do you corral that and shape it. That's what gave rise to this conversation about this fluid motion coming in and then going out again. So I suppose gathering in all of these ideas and then trying to identify some threads and then going back to people and saying, well, these seem to be the main threads, what do you think about that? Does it seem to

represent what you were feeling? Amongst these, how would you prioritise them? I suppose you're constantly doing that. And then saying, ok, we've got these three priorities, now let's open them up and expand again... (Participant 2)

One approach would be to integrate a more explicit focus on this **fluid motion – through the expansion and contraction of the discussion** – into future workshops. More sustained attempts could be made by drawing agreed conclusions from the previous discussion, before moving on to discuss the next collaboratively agreed objective. Such a model may approximate the form depicted in figure 1 below.

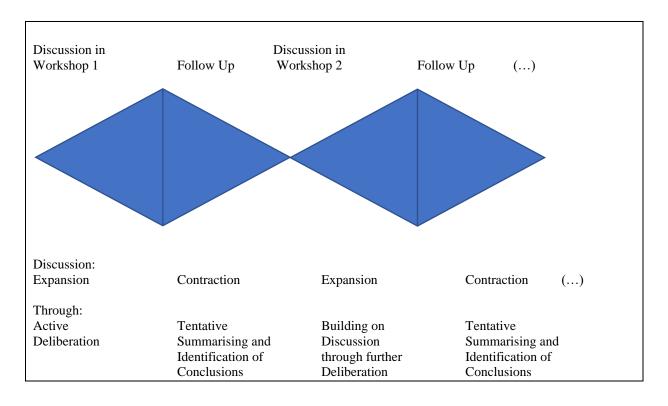


Figure 1: A Fluid-Motion Model to Co-Productive Strategy Development

This model was partially used in the river Colne workshops. In particular, the participant summary of the first workshop, circulated by organisers prior to the second session, produced considerable productive debate at the beginning of workshop two. At the same time, disagreement around the contents suggests the approach could have been improved given additional time and resources. Such an approach could potentially be used to explicitly frame and develop the whole session.

Recommendations

- Explore the **potential for an explicit fluid-motion model** for future workshops.
- Identify a **realistic timeframe for the preparatory work** for the follow-up session and **allocating responsibility and resources** to do so. Initial feedback could also be collected via email to streamline the discussion.
- Ensure sufficient knowledge is at the disposal of participants.
- Effectively integrate workshop discussions on different green-blue spaces. This is particularly important given the emerging emphasis on connectivity, and the likelihood of overlapping stakeholder groups.
- Integrate any future workshops effectively with the Partnership Group, if established. This could potentially be achieved by using the Partnership Group as the forum for any future workshops.
- Supplement the existing CCC-focused stakeholder identification process through knowledge derived from the existing network and/or a Partnership Group. A **snowball effect** can expand the network, although clear limits must be set to keep it within a manageable scope.

7.1.3. Management of the River Colne

Whilst a Partnership Group could be developed to support the development of Colchester city's BGI strategy as a whole, the pilot also revealed a specific interest in better managing the River Colne. Participants frequently criticised the **fragmented manner** in which the river is viewed, addressed by no clear overarching policy or vision. Other participants argued the Colne is currently **un-managed or poorly managed.** Examples cited included unlicensed and unsafe moorings, poorly maintained vehicles, oil spills from wrecks, unlicensed dredging, and a lack of policing and enforcement.¹⁵

¹⁵ However, the severity and cause of such issues were disputed by other participants. For more on potential conflicts and alternative knowledges and valuations of the Colne, see section 5.3 above.



Images: Examples of poor management along the river Colne. Courtesy of James Thomas, Harbour Master, Brightlingsea Harbour Commissioners.

This gave rise to different visions for better management of the Colne. For one participant:

...Let's treat the whole of the river as one continuous project in its own right and have a couple of people, a small team, responsible, or responsible in part, for the integrity of the Colne as it flows through Colchester... It will mean some named people, some named part of the Council, are looking out for the whole thing and thinking about that as a continuous project. So that would be the very first thing I'd do. (Participant 2)

Another participant expressed the need for better management but **removed from direct Council control**. As they explained:

Have a management group to deliver the revenue raising improvements. And what I said management group ... a quorum of people that can discuss, make sensible decisions and then spend money sensibly and come up with ideas of how... Or take ideas that are being held up and then present them to the executive with a lot of

amendments and sensible resolutions. And then get that team, that board, if you like, to make that happen... And then we'll get less wasted money and a much quicker response... Everything takes so long, and that's why they need to ... take the political element away from it, and give it to some people to get on with it once the decision has been made....

We're almost trying to reinvent something. This already exists, this sort of format, and it's not my idea... Look into the good management guide for Trust Ports you will see that.¹⁶ But in summary, you need to have a board. We call them a board of commissioner, but you can call it any board... perhaps eight, maybe ten on that board... We want people who are pretty strategic, clinical... Have clear aims and priorities and see that through... [People who] are focused on getting stuff done. Because getting stuff done, popular or not popular, is the most important thing.

Advisory bodies, yes. Must have them. Stakeholder groups, yes. Must have them.... And once that information is absorbed, the board can then sit down and mesh through it and see which from that come the priorities and how they'll react ... [But] A board of the wrong people is as bad as not having a board at all. Otherwise, you just get statis... (Participant 3)

Another suggestion for funding was **user-fees and the revenue-raising potential** of the Colne itself. However, there was some disagreement in the workshops and interviews around such issue. To reduce conflict and increase buy-in, decisions on such issues would ideally be made through appropriate participatory processes. It would also be important to fully integrate management of the Colne with Colchester city's wider BGI-strategy.

Whilst there is some reason to suggest the Colne may be a particular case, at this stage it is unclear whether similar demands for more integrated management might arise in relation to other types of blue-green spaces in Colchester city.

¹⁶ For further information, see the following report:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/918508/ports-good-governance-guidance.pdf

Recommendations

- **Investigate possible management structures** to overcome the existing fragmented approach to better manage the Colne
- To reduce conflict and increase buy-in, **initial decisions on establishing management structures and aims** would ideally be made through appropriate participatory processes.
- Ensure future management of the Colne is **fully integrated** within Colchester city's wider BGI-strategy.

7.2. Coproduction of Knowledge: Participatory Community Mapping

During the second workshop, participants expressed concern about the approach taken during the pilot and advocated an alternative approach. Instead of focusing on future activities and potential projects, there was a widely held view that the Council should focus on **establishing what is already there**.¹⁷ This seemed to be generally well supported by participants in the focus group discussions. As one interviewee expressed it:

I felt that there wasn't enough initial emphasis in the focus group discussions on what was already there and how it needs to be protected rather than just initiating a discussion about projects that we might come up with to intervene and change it... I personally think that, if you like, the initial phase of this current project should have been an ecological survey of that area. And discussions with people who actually use it on what they get from it, what sort of asset it is for them and how they think it could be improved... And that sort of survey would be a kind of democratic participation, you'd actually be getting the views of people who already use the asset... or even maybe a sample survey of some kind where you try a representative sample of households and actually ask them if they ever use the green spaces and what do they know about them, and if they don't use them, why they don't use them. (Participant 1)

¹⁷ This approach is also discussed in sections 5.2 (particularly 5.2.1) above.

These comments reflect a particular approach to a key aspect of the GI approach recommended by Natural England (2022a).¹⁸ Natural England's second principle for how to do good green infrastructure is '**Evidence'**. They recommend pulling both quantitative and qualitative data on blue green and spaces, including quantity, quality, accessibility (proximity), naturalness, functionality and multiple benefits, distribution, connectivity, landscape, beauty, sense of place, biodiversity (increasing coming to the fore to provide the evidence for Biodiversity Net Gain) and health inequalities (to target issues related to physical and mental wellbeing). This is also a key principle of the recently published Essex GI Technical Standards (ECC, 2022).

A number of participants at the focus group discussions stated that their organisations already held information which could contribute to **an ecological survey**. Many are already engaged in a variety of surveys or other 'citizen science' initiatives. One notable example is the Roman River report, published by the Colchester Natural History Society and the Essex Wildlife Trust (Tansley, 2019). The proximity of the University of Essex means there may also be opportunities for academic input.

To this primarily ecological approach to mapping, we might add further social and community aspects, including identifying key stakeholders, community groups and other community assets; land ownership, green space usage; and user values, memories, and stories. In this way, community assets could be mapped within the same framework, illuminating **the multiple functions and values of BGI** and simultaneously enabling a **more systematic mapping of stakeholders**. Citizens could be asked to contribute their **use, experiences and memories of blue-green spaces**. Another participant advocated digital mapping as a particularly promising method for this. Referring to the focus group discussions, the participant explained:

I think the idea to map it [the Colne] is really excellent. To have a digital layered back of the [Colne] that we could build up information. We could have historic layers, looking at timelines of it, biodiversity, human interaction with the Colne. We could have different layers... you can make it interactive. You can invite your public to interact with that map and to add information to it. (Participant 2)

¹⁸ For more on Natural England's first principle 'Partnership and Vision', see section 2.2 above.

In this way, a **multifaceted participatory approach** could be taken to this mapping exercise, combining scientific and local knowledges (Reed, 2008) and different ways of valuing the Colne. Indeed, whilst allocating economic values to environmental assets can be controversial, **mapping the different values** (economic, social, and insurance) could potentially help justify the case for investing in BGI. The full value(s) of BGI is typically under-estimated, meaning BGI appears more costly and less economically desirable than recognised by a full valuation.

A participatory mapping exercise could therefore be an invaluable tool, **contributing directly to the co-production of the strategy, as well as providing baselines and tools for co-monitoring the strategy**. At the same time, it would potentially provide other education, communication and community-building functions. Whilst it would be important to commence this exercise in the early phases of the project, other elements of the participatory process would not necessarily need to wait until its completion. For example, the development of a Partnership Group could be pursued in tandem, as mutually interrelated processes.

Recommendations

- Explore opportunities for collaborative socio-ecological mapping of existing bluegreen spaces
- Engage a wide range of local organisations and individual citizens in order to draw on and collate their expertise, knowledges and experiences
- Use methods of coproduction to build an evidence-base for the BGI strategy, including baselines for co-monitoring the strategy

7.3. Citizen Engagement

In general, public engagement was widely recognised as crucial to the success of the BGI strategy but ideas for effectively doing so were least well developed. Three possible approaches for citizen engagement are explored here.

7.3.1 Championing Community-Led Projects as Co-Production

A number of community-driven initiatives were discussed in the focus group discussions and interviews, including 'low mow' in Wivenhoe and enhancement to King Edwards Quay. For

some participants, Council support for these projects was considered to be an important form of co-production.

... The co-designing and the co-production come from encouraging people to follow their instincts ... I think on a more granular basis, at a very local level, and I think much of this stuff has to happen at a local level, encouraging people like me in the kind of things we're doing is a really good way to go and to look at it as co-production. Because I feel as though I'm co-producing something with the councils around this, and the sooner they pick it up and just do it generally, the happier I will be.' (Participant 12)

Harnessing the energies of these groups and better enabling initiatives which are in line with the BGI strategy, could be one avenue for co-producing BGI across Colchester city. For initiatives which are not resource intensive (for example, which require *not* doing something), this could be cost-effective for CCC, as these groups express willingness to carry out some of the work themselves, for example, by conducting surveys or talking directly with residents. Allocating resources to be explicitly spent on supporting such initiatives could be one element of co-production in the strategy. This might also help **mitigate conflict and frustrations** expressed towards CCC when initiatives are not deemed adequately supported:

We'd like some enrichment of the biodiversity, the botanical biodiversity at [place name] ... And that would mean green hay, it would mean bringing in some cuttings from more botanically diverse green field, green sites, which we've got in Colchester [city], and just allowing the seeds to set. And for two years running that's proved beyond the logistical capabilities of the council to do. (Participant 1)

Nevertheless, these initiatives require extensive time commitments, perseverance and considerable political literacy, and as such are unlikely to be available options for many citizens. It also seems less likely to be an option for more complex, resource-intensive projects.

7.3.2. Identify Climate-Sensitive Participatory Budgeting (PB) Opportunities

Another option is to **enact initially small-scale experiments in climate-sensitive PB** (Cabannes, 2020) These more structured schemes would give less well-connected residents the

opportunity to participate in co-production in their local area. In PB, members of the community develop their own projects, which are then voted on by the community, to decide which projects 'win' the pre-allocated resources. Areas with well-developed communities and a strong sense of what would improve their area, such as King Edwards Quay, may be particularly favourable pilot areas. Experiments in PB do take considerable commitment but results have been impressive. PB has also been shown to be particularly effective at engaging disadvantaged and traditionally non-engaged communities. Research also shows climate-focused PB arises from the lived experience of climate change and ecological degradation on local populations (Cabannes, 2020).

PB may also be one route for directly engaging young people. For instance, there are examples of **climate-focused PB in schools in Lisbon** (Cabannes, 2021; Falanga, 2021). Indeed, one participant suggested engaging youth through youth-groups and schools, and PB may be one tool which could be used in doing so.

...Youth groups, the Scouts, the Woodland Folk, groups of that sort might well... and schools. Schools can be incredibly frustrating places to communicate with... there won't necessarily be a person with a specific responsibility for engagement. But I do think that schools ought to be increasingly willing to be engage and young people's voices through that.' (Participant 4)

Similarly, climate-focused PB often support community-led education projects.

7.3.3. Education and Communication

A common theme mentioned by many participants was people's ability to **understand actions and decisions following explanations or discussions**.

Yes, so, I have worked on nature reserves where a huge amount of tree felling gone on and people have said, well you know, you're supposed to be conserving nature and you're felling all these trees. And you have to explain in detail why that was being... What's the priority here? It's not these trees. It's this, that and the other. And it's telling that story, isn't it. (Participant 7) So I think the biggest problem is not convincing people, because once you explain why to people, they're pretty onside... (Participant 3)

I think with more discussion you find that people quite readily appreciate that that's too superficial and not sufficiently nuanced green policy. (Participant 1)

This suggests that well-conceived education and communication initiatives, from the macro to the micro level, could have very positive effects.

Another common theme was the love for the river expressed by participants, and a desire to **share and (re-)build further attachment with the river in their communities**. In relation to a proposed digital mapping project, one participant suggested:

It would be great to have a big open day in which you had a giant map of the Colne and just get people to come and pin their memories onto it... To come and get back in love with your river. Recognise its shape. Tell us stories about what you've done along the Colne over the year... You've got to get people to love to care about the river again. And not just a little patch that runs near them but have a sense of the whole thing... Because if they care about it, they'll look after it. And they'll also understand if you do things that don't make sense to them... If people understand about the needs of the river and its importance and have a love for it, then it's easier to win them over in arguments for, this is why we're rewilding the river banks, and we're not mowing the riverbanks... All of those things about engaging your public, genuinely educating your public, will help towards those...

Finally, implementing good GI policies was suggested itself as a form of education through **normalisation**. As one participant explained:

I suppose one of the things we're doing there is creating a wilder version of nature in the urban environment that kids then literally walk past on their way to school. They literally walk through it on their way to school. Yesterday I went up to our recreation field... We've got four big areas there that the council has left, at our request, to grow wild... There was a kid and his father playing football just to the edge of one... Three times, the child's football landed in the middle of the wild patch. Three times, the child

came and got it out. And I thought, all he's doing is playing football, but he's walking about in a field of wildflowers as well. So somewhere, that will be part of his recollection of childhood, that there are wildflowers about...

But the point is that the objective of bringing nature back to people again, and in some respects reminding them it's there. In some respects, challenging them with this, but more importantly, simply normalising it again. Because it used to be normal. It used to be normal for nature to be there, but now it's not. And if it does encroach, that's what we see it as. We see it as encroachment. It's not that actually, that's what's supposed to happen...' (Participant 12)

Significantly, education initiatives should not be seen as unidirectional. Indeed, the value of education being led by citizens and organisations has been emphasised throughout this report, for example the Woodland and Biodiversity Project. Opportunities for **multi-directional** education initiatives should be actively considered in all engagement initiatives.

8. Conclusion

It is now well recognised that a thoughtful, well-conceived BGI strategy can enable communities to harness the multiple benefits of positively managing and promoting blue-green spaces. To be most effective, appropriate participatory processes should be used throughout the entire process, from conceptualisation and design to implementation and monitoring. The river Colne pilot successfully utilised meaningful participation with a wide range of key stakeholders. The findings from the study have engendered an understanding of the ways in which CCC could leverage on the lived experiences and unique expertise of diverse stakeholders and citizen groups, in developing a new BGI strategy that will help the Council to accelerate the realisation of net zero goals. In particular, the pilot has delivered:

- An **outline of priority areas for the river Colne**. The analysis discussed in chapter five could be helpfully used as a starting point for further participant deliberations in the ongoing strategy work
- A detailed evaluation of the **benefits and limitations of the participatory approach taken**, including identifying areas where further work needs to be done to identify, engage and empower stakeholders, communities and citizens.
- A framework of **potential participatory approaches** which could be used at different phases of the ongoing development of the BGI strategy.

These findings were used to **develop key recommendations** which were presented in chapters five, six and seven respectively.

Significantly, the pilot also revealed **the multiple ways in which participants value the river and other blue-green spaces within Colchester city**. Harnessing the passions and energies of participants and other local stakeholders and citizens will be key to developing and delivering a successful BGI strategy for Colchester city, and effectively leveraging the many benefits BGI can offer.

References

- Adams, B. (2004). Public meetings and the democratic process, *Public Administration Review*, Vol, 64, No.1, pp. 43-54.
- Ahrens, T. and Ferry, L. (2015), Newcastle city council and the grassroots: accountability and budgeting under austerity, *Accounting, Auditing & Accountability Journal*, Vol. 28, No.6, pp. 1-28.
- Ariely, G. (2013). Public administration and citizen satisfaction with democracy: crossnational evidence, *International Review of Administrative Sciences*, Vol. 79, No. 4, pp. 747-766.
- Barbera, C., Sicilia, M. and Steccolini, I. (2016), The participatory budgeting as a form of coproduction. In: Fugini, M., Bracci, E., Sicilia, M. (eds), Co-production in the Public Sector. SpringerBriefs in Applied Sciences and Technology. Springer, Cham. Available at: https://doi.org/10.1007/978-3-319-30558-5_3.
- Bartocci, L., Grossi, G., Mauro, S. G. and Ebdon, C. (2022), The journey of participatory budgeting: a systematic literature review and future research directions, *International Review of Administrative Sciences*, 0(0). Available at: https://doi.org/10.1177/00208523221078938
- Bräutigam, D.A. 2004. The people's budget? politics, power, popular participation and propoor economic policy, Expert Group Meeting on Participation of Civil Society in Fiscal Policy, UN-DESA, New York. Available at: <u>http://unpan1.un.org/intradoc/groups/public/documents/UN/UNPAN020213.pdf</u>
- Brown, K. and Mijic, A. (2019). 'Integrating green and blue spaces into our cities: Making it happen.' Grantham Institute Briefing paper, No 30.
- Brun-Martos, M.I. and Lapsley, I. (2017), Democracy, governmentality and transparency: participatory budgeting in action, Public Management Review, Vol. 19 No. 7, pp. 1006-1021.
- Burns, D., Hambleton, R., Hoggett, P. (1994), The politics of decentralisation: revitalising local democracy, MacMillan.
- Cabannes, Y. (2020). 'Contributions of Participatory Budgeting to climate change adaptation and mitigation. Current local practices around the world & lessons from the field.' Barcelona: IOPD; Barcelona: UCLG; Dakar: Enda ECOPOP; Paris: FMDV; Surakarta: Kota Kita Foundation; London: UCL / DPU. Available at: <u>https://discovery.ucl.ac.uk/id/eprint/10113102/1/2020%209%20PB%20contributions</u> <u>%20to%20ClimateChange%20adaptation%20and%20mitigation.%20Cabannes.%20</u> <u>medium%20RES.pdf</u>
- Cabannes, Y. (2021) Greening cities through Participatory Budgeting: Answers to climate change from Lisbon, Portugal and Molina de Segura, Spain. Lisbon: Câmara Municipal de Lisboa; Zürich: City Finance Lab; Amsterdam: EIT Climate-KIC; Paris: FMDV;

Barcelona: IOPD; Zürich: South Pole. Available at: https://fmdv.net/admin/Images/Publications/137/20216GREENINGCITIESEBOOK_ FMDV.pdf

- Célérier, L. and Botey, L.E.C. (2015), Participatory budgeting at a community level in Porto Alegre: a Bourdieusian interpretation, Accounting, Auditing & Accountability Journal, Vol, 28, No. 5, pp.739-772.
- Colchester City Council (CCC) (2011). Colchester Borough Green Infrastructure Strategy: Final Report. Available at: <u>https://cbccrmdata.blob.core.windows.net/noteattachment/Green%20infrsatructure%2</u> <u>OFinal%20Report%20Part%201.pdf</u>
- Colchester City Council (CCC) (2021a). *Climate Emergency. Action Plan 2021-23*. Available at: <u>https://www.colchester.gov.uk/sustainability/our-climate-emergency-action-plan/</u>
- Colchester City Council (CCC) (2021b). 'The Colchester Woodland and Biodiversity Project' Available at: <u>https://www.colchester.gov.uk/better-</u> colchester/colchesterwoodlandbiodiversity/
- Environment Act (2021) c. 30. Available at: <u>https://www.legislation.gov.uk/ukpga/2021/30/pdfs/ukpga_20210030_en.pdf</u> (Accessed on 28th November 2022).
- Essex Climate Action Commission (2021). *Net Zero: Making Essex Carbon Neutral*. Available at: <u>https://assets.ctfassets.net/knkzaf64jx5x/1fzMJKNmIfz8WHx4mzdy2h/e7c57523466f</u> 347fd6cdccb3286c113c/Net-Zero-Report-Making-Essex-Carbon-Neutral.pdf
- Essex County Council (ECC) (2020). Essex Green Infrastructure Strategy. Available at: <u>https://www.placeservices.co.uk/media/325323/EGIS_MainStrategy_09062020-</u> <u>LR.pdf</u>
- Essex County Council (ECC) (2022). Essex Green Infrastructure Standards: Technical Guidance. Available at: <u>https://assets.ctfassets.net/knkzaf64jx5x/1I9C1yNuRqXan645yP3M5D/b490b69f685</u> <u>8750451fd5ebf00c88b57/Essex-Green-Infrastructure-Standards-Technical-Guidance.pdf</u>
- Everett, G., Adekola, O. and Lamond, J. (2021). 'Developing a blue-green infrastructure (BGI) community engagement framework template.' Urban Design International. <u>https://doi.org/10.1057/s41289-021-00167-5</u>
- Falanga, R., Verheij, J. and Bina, O. (2021) Green(er) Cities and Their Citizens: Insights from the Participatory Budget of Lisbon. *Sustainability*, 13,8243. Available at: https://doi.org/10.3390/ su13158243
- Flinders, M. and Dommett, K, (2013), Gap analysis: participatory democracy, public expectations and community assemblies in Sheffield, *Local Government Studies*, Vol. 39, No. 4, pp. 488-513.

- Fung, A. (2006), Varieties of participation in complex governance, *Public Administration Review*, Vol.66, No. s1, pp. 66-75.
- Ghofrani, Z., Sposito, V. and Faggian, R. (2017). 'A Comprehensive Review of Blue-Green Infrastructure Concepts.' International Journal of Environment and Sustainability, 6(1), 15-36.
- Gómez-Baggethun, E. and Barton, D. N. (2013). 'Classifying and valuing ecosystem services for urban planning.' *Ecological Economics*, 86, 235–245.
- Gregg, R., Elias, J. L., Alonso, I., Crosher, I. E., Muto P. and Morecroft, M.D. (2021) 'Carbon storage and sequestration by habitat: a review of the evidence' (second edition) *Natural England Research Report NERR094*. Natural England, York.
- Grillos, T. (2017), Participatory budgeting and the poor: tracing bias in a multi-staged process in Solo, Indonesia, *World Development*, Vol. 96, pp. 343-358.
- Gusmano, M. (2013), FDA decisions and public deliberation: challenges and opportunities, *Public Administration Review*, Vol.73, No. 1, pp. S115-S126.
- HM Government (2018). A Green Future: Our 25 Year Plan to Improve the Environment.

 London.
 Available

 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachme

 nt_data/file/693158/25-year-environment-plan.pdf
- Hong, S. (2015), Citizen participation in budgeting: a trade-off between knowledge and inclusiveness? *Public Administration Review*, Vol. 75, No. 4, pp. 572-582.
- Hong, S. and Cho, B.S. (2018), Citizen participation and the redistribution of public goods, *Public Administration*, Vol. 96, No. 3, pp. 481-496.
- Lapsley, I. (2008), The NPM agenda: back to the future, *Financial Accountability and Management*, Vol. 24, No.1, pp.77-96.
- Lassou, P., Jayasinghe, K., Soobaroyen, T., Adhikari, P., Wynne, A. and Akakpo, M. (2021), Fostering Health Service Delivery via Public Financial Management: The Case of Participatory Budgeting in Benin's Local Governments, Research Paper Series, PEFA. [https://www.pefa.org/resources/fostering-health-service-delivery-public-financialmanagement-case-participatory]
- Lowndes V. and Wilson, D. (2001), Social capital and local governance: exploring the institutional design variable, *Political Studies*, Vol, 49, No. 4, pp. 629-647.
- Lyon, F. (2000), Trust, networks and norms: the creation of social capital in agricultural economies in Ghana, *World Development*, Vol.28, No. 4, pp. 663-681.
- Manes-Rossi, F., Brusca, I., Orelli, R., Lorson, P. and Haustein, E. (2021), Features and drivers of citizen participation: insights from participatory budgeting in three European cities, *Public Management Review*, forthcoming, <u>https://doi.org/10.1080/14719037.2021.1963821</u>

- Michels, A. and De Graaf, L. (2010), Examining citizen participation: Local participatory policy making and democracy, *Local Government Studies*, Vol. 36, No. 4, pp. 477-491.
- Ministry of Housing, Communities and Local Government (2021). National Policy Planning
Framework.London.Availablehttps://www.gov.uk/government/publications/national-planning-policy-framework--2
- Musso, J., Weare, C., Bryer, T. and Cooper, T.L. (2011), Toward strong democracy in global cities? Social capital building, theory-driven reform, and the Los Angeles neighbourhood council experience, *Public Administration Review*, Vol. 71, No. 1, pp. 102-111.
- Natural England (2022a). Introduction to the Green Infrastructure Framework Principles and
Standards for England. Available at:

https://designatedsites.naturalengland.org.uk/GreenInfrastructure/Home.aspx
(Accessed on 28th November 2022)
- Natural England (2022b). *Biodiversity Net Gain. An Introduction to the Benefits*. Available at: <u>https://naturalengland.blog.gov.uk/wp-content/uploads/sites/183/2022/04/BNG-Brochure_Final_Compressed-002.pdf</u>
- Niemeyer, S. (2013). Democracy and Climate Change: What Can Deliberative Democracy Contribute? *Australian Journal of Politics and History*, 59(3), 429-448.
- Nieuwenhuijsen, M. J. (2021). 'Green Infrastructure and Health.' Annual Review of Public Health, 42, 317–28.
- Office for National Statistics (ONS) (2021). 'How has lockdown changed our relationship with nature?' Available at: <u>https://www.ons.gov.uk/economy/environmentalaccounts/articles/howhaslockdownch angedourrelationshipwithnature/2021-04-26</u>
- Reed, M. S. (2008). 'Stakeholder participation for environmental management: A literature review.' *Biological Conservation*, 141, 2417–2431.
- Rossmann, D. and Shanahan, E. (2011), Defining and achieving normative democratic values in participatory budgeting process, *Public Administration Review*, Vol. 72, No. 1, pp. 56-66.
- Shah, A. (2007), *Participatory Budgeting, Public Sector Governance and Accountability Series*, The World Bank, Washington.
- Tansley. D. (ed.) (2019). *Roman River Valley Living Landscape*. Essex Wildlife Trust, Great Wigborough.
- Tholen, B. (2015), Citizen participation and bureaucratization: the participatory turn seen through a Weberian lens, *International Review of Administrative Sciences*, Vol. 81, No. 3, pp. 585-603.
- Wampler, B. (2007), A guide to participatory budgeting, in A. Shah (ed.) Participatory Budgeting, *Public Sector Governance and Accountability Series*, The World Bank, pp.21-54.

Project team bios

Kate Seymour is a Lecturer in Sustainability at Manchester Metropolitan Business School. Her research examines democratic organizing and participatory governance, within and between organisations, in contesting unsustainable practices and building solidarities. She is interested in using interdisciplinary feminist perspectives to explicitly consider inequalities, care, and precarity within the context of sustainability practices, policies, and governance.

Danson Kimani is a Senior Lecturer in Accounting and Finance at the School for Business and Society, University of York, UK. He is also a Visiting Fellow at the Essex Business School, University of Essex, UK. His research is focussed on the areas of accounting and accountability in private and public sector contexts, corporate governance, and social and environmental accounting. He is also actively engaged in co-designing policy solutions with UK and overseas-based practitioners, focussing on global priorities of the 21st century including addressing the climate change challenge, and the safeguarding of ecosystems and species.

Pawan Adhikari is a Professor of Accounting at Essex Business School. His research is focused on public sector accounting/accountability and is widely used in policy making. He has worked in several research projects funded by the PEFA/World Bank, European Commission, British Academy, African Accounting and Finance Association, and University of Essex. Presently, he serves as an Associate Editor of the Journal of Public Budgeting, Accounting and Financial Management. He is also an executive board member of the Comparative International Government Accounting Research (CIGAR) network.

Teerooven Soobaroyen is a Professor of Accounting at Essex Business School, University of Essex. His research and impact work addresses the role of accounting, accountability and governance in diverse settings, with a focus on the Global South. Some of his recurring topics relate to social, environmental and governance disclosure practices, the implementation of corporate governance codes participatory budgeting and public sector accounting, some of which have been published in key internationally recognised journals Recent research and commissioned reports have been funded by the Global Challenges Research Fund (GCRF), the African Professionalisation Initiative (API), the World Bank's Public Expenditure and Financial Accountability (PEFA), UK Financial Reporting Council, Gesellschaft für Internationale Zusammenarbeit (GIZ), and the European Union Delegation.

Kelum Jayasinghe is a Professor of Accounting and Development Policy at Essex Business School. His research is focused on accounting and accountability in the public and no-profit sectors. His international visibility is evidenced in his extensive profile of publications in reputed journals, including Accounting, Auditing and Accountability Journal (AAAJ); Critical Perspectives on Accounting (CPA); Accounting Forum and Financial Accountability and Management (FAM), etc. His academic career is complemented by few years of industry work experience (in Sri Lanka) and many years of experience in knowledge-transfer activities with public sector organisations and trans-national organisations including UNDRR and World Bank. He is the current President of BAFA - Special Interest Group on Accounting and Finance in Emerging Economies (AFEE) and also represents the BAFA's Executive Committee, the technical committee member of African Accounting and Finance Association (AAFA) and the Comparative Asia Africa Governmental Accounting (CAAGA) Association. Currently, he serves on the editorial boards of many reputed journals AAAJ, JPBAFM, JAEE and AAFJ (Associate Editor).