CLIMATE FRIENDLY HOUSING WORKSHOP

Summary Notes & Key Themes

4th March 2026, QMU, Musselburgh

SUMMARY

A multi-disciplinary workshop was held to explore how planning, development, and community action can support better places, stronger biodiversity, and climate-resilient environments.

Participants included planners, developers, landscape professionals, community representatives, and environmental specialists. The workshop explored practical challenges and opportunities related to:

- place-making and community spaces
- biodiversity protection and green space management
- nature-based solutions for climate resilience.

Throughout the workshop several consistent themes emerged.

1. Early integration of nature and community considerations
Participants emphasised that ecological and place-based considerations must be integrated early in the design and planning process. Development proposals often attempt to incorporate environmental features later in the design process, limiting their effectiveness. Design approaches that respond to existing habitats, landscapes, and communities were seen as essential. Creation of green infrastructure prior to development. More mature green infrastructure apparently has meant earlier house sales due to better environment which is better for house builders as borrowing for shorted period

2. Long-term stewardship and maintenance
A recurring concern was the long-term management of green infrastructure and community spaces. Participants highlighted uncertainty around responsibility for maintenance between:

- developers
- local authorities
- property factors
- community groups.

Without clear governance arrangements and funding mechanisms, there is a risk that green infrastructure and community spaces may decline in quality over time.

3. Governance and responsibility
Discussions revealed that ownership and governance of shared spaces remains complex. Different models exist, including local authority adoption, developer management, factoring arrangements, and community stewardship. However, participants noted that these arrangements are not always clearly defined at the planning stage. It was noted that good design can result in more minimal maintenance i.e. working with nature

There was interest in exploring alternative governance models, including:

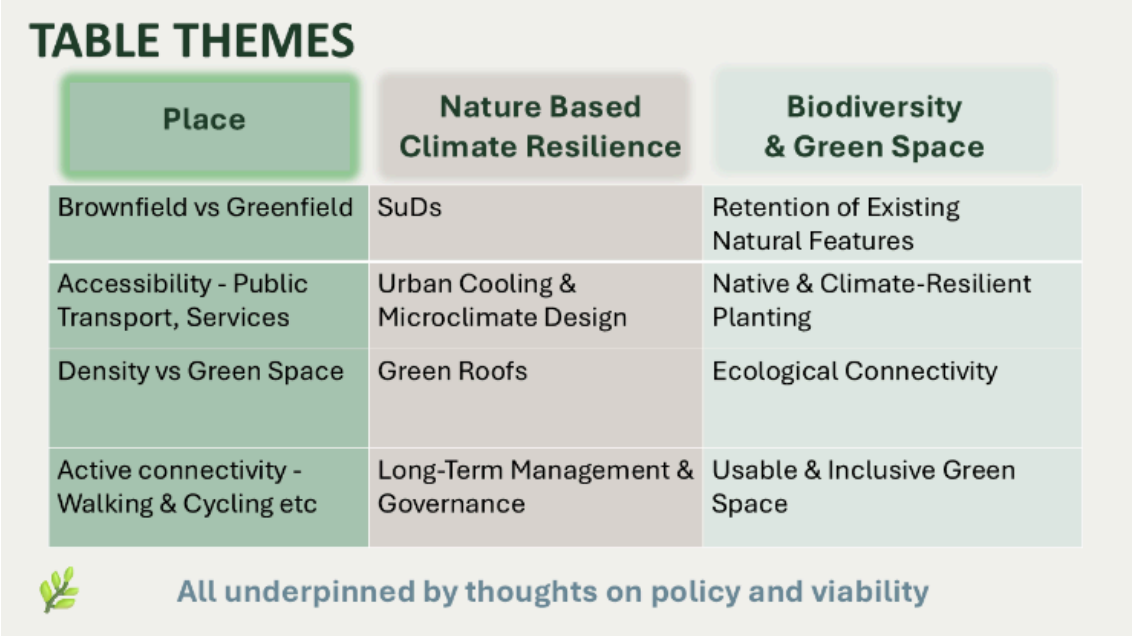
- community stewardship approaches
- not-for-profit management organisations
- ranger or stewardship programmes supporting local delivery.

4. **Community engagement and collaboration**
   Participants emphasised the importance of early and meaningful community engagement in shaping development proposals.
   Community groups can contribute valuable local knowledge and play a role in managing green spaces. However, there are challenges in connecting developers with appropriate community organisations and ensuring that engagement processes are accessible and effective.
   Planning system capacity

5. **Structural challenges within the planning system were identified, including:**
   - limited capacity within planning teams
   - inconsistencies between local authority approaches
   - difficulties translating policy aspirations into implementation.

Addressing these challenges will be critical to ensuring that planning policies relating to biodiversity, place-making, and climate resilience can be effectively delivered.

The pages that follow provide more detailed summaries from the discussions round each theme.



QUICK ACCESS LIST

QUICK WINS, KEY CHALLENGES & NEXT STEPS

Quick wins

- Early identification of habitats, soil conditions, and landscape characteristics to help ensure that developments respond appropriately to local environmental conditions.
- More robust application of mitigation hierarchy, i.e.: avoid, minimise damage, restore and compensate as a last resort.
- Awareness raising/education with new residents in their welcome packs around nature features, such as wildflower meadows or wilder edges.
- Greater diversification of hedgerow trees.
- Workshop with planners and developers to explore how to do this best. This would explore the idea of community liaison panels with planners, so communities can input officially. This may take some legislation to actually get done, but it would also be helpful to have a pilot.

Longer-term wins

- Strengthening links between developers, planners, and communities.
- Site-specific design that utilises existing biodiversity features.
- Bringing ecological expertise and local ecological knowledge into the concept stage of development design to ensure that biodiversity considerations shape development layouts.
- Development of assessment frameworks or scoring systems similar to biodiversity net gain or other infrastructure metrics.
- Improved involvement of community organisations to help developers better understand local priorities and concerns and can help create spaces that are better cared for and more valued by residents, as well as enabling community monitoring and stewardship to support long-term ecological outcomes.
- Biodiversity net gain implementation in Scotland

Key Challenges

- Aligning both aspiration and practice between different organisations, providers and services was raised to meet ecological aims, such as around SUDs.
- Ongoing management of biodiversity features, including involving community-led initiatives without proper resources or structures.
- Developing affordable and logistically viable practices to ensure soil is left in the best condition it can be.

THEME 1 – NATURE BASED CLIMATE RESILIENCE

The focus of this group was to explore opportunities and challenges associated with delivering nature-based climate resilience within new development and existing communities. They considered how nature-based solutions – such as sustainable drainage, tree planting, habitat retention, air quality, shade and cooling effects of vegetation and green infrastructure – can be better integrated into development processes and managed effectively over the long term. Key themes, challenges, and opportunities are summarised below.

Integrating Nature-Based Solutions in Development

Participants highlighted a wide range of nature-based measures that can support climate resilience and biodiversity in new developments. These included:

- Sustainable Urban Drainage Systems (SUDS)
- rain gardens
- street trees and canopy cover
- hedgerows and boundary planting
- wildlife corridors such as hedgehog highways
- green roofs
- habitat retention and enhancement
- living walls and other micro-scale interventions.
- land sharing and land sparing concepts in ecology. i.e better to have blocks of land for biodiversity rather than same area chopped up into small features which will not support same level of biodiversity

A strong theme emerging from discussions was the importance of designing developments around existing ecological features rather than attempting to retrofit nature into projects later in the planning process.

Participants noted that understanding the baseline ecological conditions of a site is essential. Early identification of habitats, soil conditions, and landscape characteristics can help ensure that developments respond appropriately to local environmental conditions.

However, participants noted that in practice ecological considerations are often introduced too late in the design process, limiting the potential for meaningful integration of nature-based approaches.

There was also recognition that many developments rely on standardised design approaches, which may not fully respond to the specific environmental characteristics of a site. Greater emphasis on site-specific design and ecological expertise was identified as an important step in improving outcomes.

Nature Networks and Green Infrastructure

Participants emphasised the role of connected green infrastructure and nature networks in supporting climate resilience. Examples discussed included:

- hedgehog highways and wildlife corridors
- hedgerow networks
- tree canopy and street planting
- connected green spaces within developments.

Such measures can support biodiversity, improve microclimates, and enhance the quality of public spaces. However, the effectiveness of these networks depends on long-term protection and management. Participants noted that landscape features such as hedgerows or tree corridors may

require legal protections or agreements, particularly where they form part of development boundaries or factoring arrangements.

It was noted that clients at times don't want or understand nature friendly features such as wildflower meadows or wilder edges. A way to overcome this would be to include information about the features and the management plans as part of the welcome pack.

The difficulty of aligning both aspiration and practice between different bodies and services was raised, from developers to Scottish Water to other service providers, when it comes to approaching feature implementation such as SUDs in a nature friendly way. Aligning goals and practices is essential to work towards biodiversity net gain.

Community monitoring and stewardship were also identified as potential mechanisms for supporting long-term ecological outcomes.

Sustainable Drainage and Blue Infrastructure

Sustainable Urban Drainage Systems (SUDS) were frequently referenced during the workshop as a key form of nature-based infrastructure. Participants highlighted the potential for SUDS features to contribute to:

- flood risk management
- water quality improvement
- biodiversity enhancement
- amenity value within developments.

Examples included:

- swales
- rain gardens
- water channels
- widened or meandering drainage systems.

However, significant concerns were raised regarding the long-term management of SUDS infrastructure. Participants noted that if developments rely heavily on features such as SUDS, it is essential that maintenance responsibilities and funding mechanisms are established early in the planning process.

Issues discussed included:

- uncertainty around who adopts SUDS infrastructure
- limited capacity within local authorities to maintain systems
- reliance on property factors whose maintenance standards may vary
- risks associated with keeping SUDS areas open versus fenced.

These challenges highlight the importance of clear governance structures and maintenance plans for blue infrastructure. It was noted that there is an APRS/ Planning Democracy webinar on this which should be helpful.

Management and Maintenance of Green Infrastructure

One of the most significant themes across the workshop was the challenge of long-term stewardship of nature-based infrastructure.

Participants identified a range of potential stakeholders responsible for maintaining green infrastructure, including:

- developers
- local authorities
- property factors
- community organisations
- not-for-profit management bodies.

However, the current system can create uncertainty about responsibility.
Participants highlighted concerns that:

- factors may not always manage green infrastructure effectively
- councils often lack resources to adopt and maintain spaces
- maintenance costs for residents can become significant.

> In some cases, green infrastructure risks becoming degraded or poorly maintained over time, reducing both ecological and community benefits. Workshop participants discussed the need for clear long-term stewardship models, potentially involving community organisations or dedicated management structures.

Community Involvement and Stewardship

The role of communities in supporting nature-based climate resilience was another key theme.

Participants recognised that community groups can contribute to:

- managing local green spaces
- monitoring biodiversity
- supporting stewardship of nature networks.

There was also discussion of potential community wealth building approaches, where local organisations could be supported to maintain green infrastructure. However, participants also noted that community management can involve significant responsibilities. Volunteer-led groups may require support, funding, or training to manage green spaces effectively. In addition, developers sometimes face challenges in identifying appropriate community groups to engage with, particularly during early stages of development planning.

Strengthening links between developers, planners, and communities was therefore identified as an important priority.

Quantifying Environmental and Community Value

Another theme emerging from discussions was the need to better quantify the benefits of nature-based infrastructure. Participants highlighted that developers and decision-makers often require clear evidence of value when justifying investments in environmental measures.

Suggestions included the development of assessment frameworks or scoring systems similar to biodiversity net gain or other infrastructure metrics.

Improved evidence could help demonstrate the wider benefits of green infrastructure, including:

- climate resilience
- biodiversity improvements
- health and wellbeing benefits
- increased attractiveness of public spaces.

Participants also raised the challenge of measuring community priorities and preferences, noting that it can be difficult to quantify what communities want from nature-based infrastructure.

Planning System Challenges

Participants identified several challenges within the planning system that can affect the delivery of nature-based climate resilience.

These included:

- inconsistencies between local authority planning approaches
- limited capacity within planning teams
- difficulty balancing environmental requirements with development viability
- the need to justify additional costs within development proposals. Biodiversity net gain legal requirement would help here

There was discussion around the implementation of national planning policy, including the role of NPF4 in promoting biodiversity and blue infrastructure.

Participants suggested that clearer guidance and stronger implementation mechanisms could help ensure that policy ambitions translate effectively into on-the-ground outcomes.

Knowledge, Skills and Early Design Engagement

Participants highlighted the importance of bringing ecological and landscape expertise into development projects at an early stage. Landscape architects and ecologists can play a key role in ensuring that developments respond appropriately to environmental conditions. Participants noted that these disciplines are sometimes engaged later in the design process, limiting their influence on development layouts.

Education and training were discussed as important factors. For example, naturalistic landscapes such as wildflower meadows may sometimes be perceived as poorly maintained spaces rather than intentional biodiversity features.

Improving understanding among:

- residents
- planners
- developers
- landscape professionals

could help support wider acceptance of nature-based design approaches.

Key Insights nature based solutions

A central insight was that many nature-based solutions already exist and are technically feasible. However, successful implementation depends on addressing broader structural issues.

Participants emphasised that challenges relating to governance, maintenance, and collaboration are often more significant barriers than technical design.

Key enabling factors identified included:

- early integration of ecological considerations in development design
- clear long-term maintenance and stewardship arrangements
- stronger collaboration between developers, planners, and communities

- improved evidence and metrics for valuing nature-based infrastructure
- greater consistency in planning policy implementation.

Addressing these issues will be critical to enabling nature-based solutions to contribute effectively to climate resilience, biodiversity enhancement, and high-quality places.

THEME 2 – BIODIVERSITY & GREEN SPACE

The focus of this group was to explore how **biodiversity and green space can be protected, enhanced, and managed within new and existing developments**. Participants discussed opportunities for improving ecological outcomes through planning policy, development design, and community stewardship.

The discussion focused on several key themes:

- retaining existing natural features
- integrating biodiversity within development design
- improving ecological management and maintenance
- strengthening community involvement and stewardship
- improving collaboration between stakeholders.

Retaining Existing Natural Features

Participants discussed the importance of retaining existing habitats and landscape features within development sites. There was recognition that retaining natural features can be challenging, but in many cases it may be easier and more effective than attempting to recreate biodiversity later.

Participants highlighted that successful retention requires a clear understanding of the baseline ecological conditions of a site, including:

- existing habitats
- soil conditions
- landscape characteristics.

Under National Planning Framework 4 (NPF4) there is some responsibility to retain biodiversity features. However, participants noted that unless requirements are clearly included as planning conditions, developers may not prioritise their protection. There was therefore strong support for ensuring that biodiversity retention is explicitly embedded within planning conditions and development requirements.

Design Approaches for Biodiversity

Workshop participants emphasised the importance of designing developments around existing habitats, rather than treating biodiversity as an afterthought.

This approach involves:

- identifying ecological features early in the design process
- integrating habitats into site layouts
- retaining natural landscape elements where possible.

Participants noted that developments are often designed first, with biodiversity features retrofitted later, limiting their effectiveness. There was discussion about the use of native planting and habitat creation, including:

- wildflower meadows
- native trees and planting schemes
- mixed native and ornamental planting in more visible areas.

However, perceptions of maintenance can create challenges. Naturalistic landscapes such as wildflower meadows are sometimes viewed as **poorly maintained spaces**, rather than intentional biodiversity features. Good design can overcome these challenges.

Education and awareness were therefore identified as important in supporting acceptance of biodiversity-friendly landscapes.

Soil and Site Management

The condition of soil and ground conditions was identified as a critical but often overlooked factor in supporting biodiversity.

Participants noted that soil quality can be significantly affected during the early stages of construction, particularly during site clearance and groundworks.

Key concerns included:

- soil compaction during construction
- loss of topsoil
- lack of protection for ecological features during early site works.

Participants emphasised the importance of storing and reusing topsoil where possible and ensuring that soil management is considered early in the development process. Novel substrates and low nutrient subsoil can be highly biodiverse so working with what is available is key.

In many cases, discussions about soil and planting occur too late, once contractors have already begun site works. Earlier engagement with landscape and ecological specialists was therefore recommended.

Ecological Management and Maintenance

Long-term management of biodiversity features was another key issue raised during the workshop. Participants highlighted the need for effective ecological maintenance, including:

- management of planted habitats
- monitoring biodiversity outcomes
- maintaining ecological corridors and green spaces.

Current management structures were seen as inconsistent. In many developments, ecological spaces may be managed by:

- property factors
- local authorities
- developers
- community groups.

Participants noted that maintenance standards and responsibilities are often unclear, which can lead to declining ecological quality over time. There was discussion about alternative management models, including trained rangers or community-based stewardship approaches.

Community Stewardship and Capacity Building

Participants discussed the role that communities can play in supporting biodiversity and green space management.

Opportunities identified included:

- community adoption of local green spaces
- youth engagement initiatives such as Junior Ranger programmes
- volunteer monitoring of biodiversity areas.

Community stewardship can support local ownership and long-term care of green spaces, while also building environmental awareness. However, participants emphasised that community management requires:

- appropriate support
- training
- coordination.

Capacity building within communities was therefore identified as an important component of successful biodiversity initiatives.

Governance and Funding

Workshop participants discussed the governance and funding challenges associated with biodiversity management. Key issues included:

- the costs of ecological maintenance
- the financial burden placed on residents through factoring arrangements
- limited resources within local authorities.

Participants expressed concerns that factoring arrangements may not always deliver appropriate ecological management, and that costs can become a significant burden for residents.
There was discussion about the potential role of not-for-profit organisations or national bodies to support or oversee ecological management. Alternative governance models could include:

- community trusts
- not-for-profit management organisations
- ranger services supporting local delivery.

These approaches may help ensure that biodiversity management is delivered in the public interest rather than solely through commercial arrangements.

Collaboration and Knowledge Sharing

Collaboration between stakeholders was identified as essential to improving biodiversity outcomes.

Participants highlighted the need for stronger coordination between:

- planners
- developers
- ecologists
- landscape architects
- communities.

Early collaboration was seen as particularly important. Bringing ecological expertise into the concept stage of development design can help ensure that biodiversity considerations shape development layouts. Participants also emphasised the value of local ecological knowledge, which can inform planning decisions and improve design outcomes.

Improving access to environmental data and facilitating community input were also identified as important steps.

Planning System Challenges

Participants identified several planning system issues affecting biodiversity delivery.

These included:

- limited capacity within planning teams
- difficulties engaging communities through planning processes
- inconsistent approaches between local authorities.

There was also discussion about the need for planners to receive additional training in ecological and biodiversity issues, as well as increased staffing capacity to support implementation.

Improving the accessibility of planning systems and engagement mechanisms was also highlighted as a national challenge.

Key Insights about Biodiversity & Green Space

First, biodiversity outcomes are strongly influenced by early design decisions. Integrating ecological considerations at the beginning of the development process is critical.

Second, successful biodiversity initiatives require clear long-term management arrangements, supported by appropriate funding and governance structures.

Third, communities can play an important role in biodiversity stewardship, but this requires support, training, and coordination.

Finally, stronger collaboration between planners, developers, ecologists, and communities is essential to delivering high-quality green spaces and resilient ecological networks.

Together, these actions can help ensure that biodiversity and green space contribute effectively to sustainable development, climate resilience, and community wellbeing.

THEME 3 – PLACE BASED PLANNING

The focus of this group was to explore how place-based planning can support stronger communities, better public spaces, and improved environmental outcomes within development.
Participants discussed the relationship between development planning, land ownership, community engagement, and long-term management of spaces. The session highlighted the importance of collaborative planning approaches that integrate community perspectives and ensure that new places are designed to support long-term stewardship.

The discussion focused on several key issues:

- governance and ownership of community spaces
- early engagement between communities and developers
- long-term management of shared spaces
- the role of planning frameworks and Local Development Plans.

Community Spaces and Place-Making

Participants highlighted the importance of creating meaningful community spaces within developments. Green spaces and public areas can support social interaction, wellbeing, and environmental benefits. However, the discussion emphasised that community spaces are often more complex to deliver and manage than expected.

Key issues raised included:

- uncertainty around who takes ownership of shared spaces
- difficulty transferring land to appropriate management bodies
- challenges ensuring long-term maintenance.

Participants suggested that developments should aim to create spaces that communities feel ownership of, rather than spaces that are purely developer-led or privately managed.

Land Ownership and Governance

Land ownership structures were identified as a key factor influencing the success of place-based initiatives. Participants noted that community spaces may involve multiple ownership arrangements, including:

- developers
- landowners
- local authorities
- property factors
- community organisations.

Questions were raised about the potential for community ownership or stewardship of land, particularly where communities wish to take a more active role in managing local spaces.
However, this approach can raise practical issues, including:

- legal arrangements for land transfer
- ongoing funding requirements
- responsibilities if community groups dissolve or become inactive.

Participants highlighted the need for clear legal frameworks and governance arrangements, particularly in cases where developers may withdraw from long-term management responsibilities.

Long-Term Management and Maintenance

A recurring theme across discussions was the challenge of long-term maintenance of shared spaces.

Participants identified several possible management arrangements, including:

- local authority adoption
- developer management
- property factoring arrangements
- community stewardship.

However, each model presents challenges. For example:

- local authorities may lack resources to maintain new spaces
- factoring arrangements can be costly for residents
- community groups may struggle to sustain long-term management responsibilities.

Participants emphasised the need to consider maintenance arrangements early in the planning process, rather than after development designs have been finalised.

Planning and Community Engagement

The role of planning processes in shaping place outcomes was widely discussed. Participants emphasised the importance of engaging communities early in planning and development discussions. Mechanisms mentioned included:

- Local Place Plans (LPPs)
- engagement with community councils
- spatial planning consultations.

However, participants suggested that current planning processes can sometimes feel rushed or difficult for communities to engage with effectively.

Improving communication and engagement mechanisms was therefore identified as an important step in strengthening place-based planning.

Visibility of Community Groups

Developers often face challenges identifying relevant community groups within an area, particularly when planning new developments.

Participants noted that improved visibility of community organisations could help developers better understand local priorities and concerns.

Community groups themselves also benefit from greater visibility within planning processes, allowing them to participate more effectively in discussions about future development.

Role of Strategic Planning

The importance of Local Development Plans (LDPs) and spatial planning frameworks was highlighted. Participants suggested that clearer guidance within LDPs could help:

- clarify land allocations
- define expectations for community spaces
- support better integration of community priorities within development.

Where sites are not clearly allocated or policies lack clarity, uncertainty can arise regarding the intended use of land and the responsibilities associated with new developments.

Opportunities for Community-Led Place-Making

Despite the challenges discussed, participants identified several opportunities to strengthen place-based planning. These included:

- empowering community groups to help shape local development
- encouraging collaboration between developers and communities
- improving planning engagement processes
- strengthening the role of Local Place Plans.

Participants noted that community-led initiatives can help create spaces that are better cared for and more valued by residents, contributing to long-term sustainability.

Key Insights about Place- Based Planning

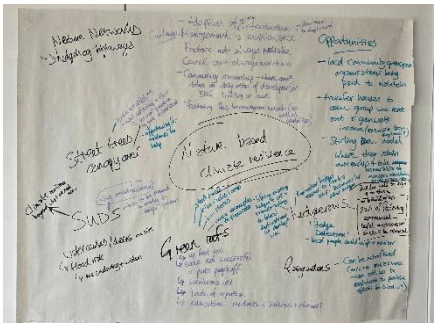
First, successful place-making depends on clear governance and ownership arrangements for shared spaces.

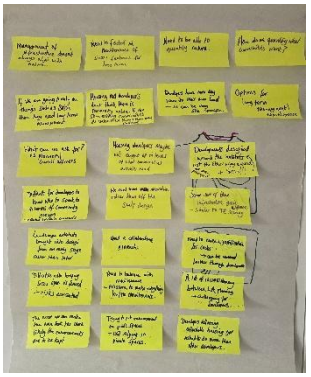
Second, long-term management considerations must be embedded in development planning from the outset.

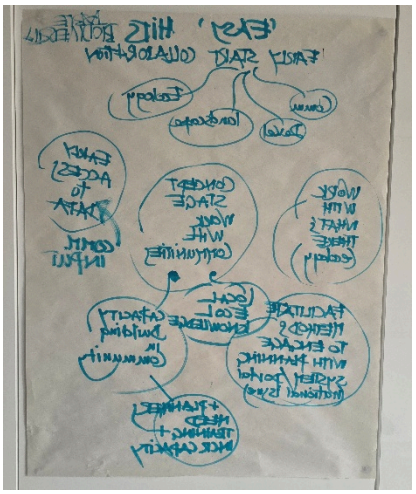
Third, stronger collaboration between planners, developers, and communities is essential to ensure that new developments reflect local priorities and support vibrant communities.

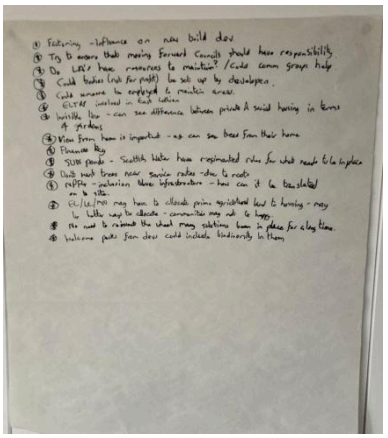
Finally, improving engagement processes and strengthening community involvement in planning can help deliver places that are socially resilient, environmentally sustainable, and well-managed over time.

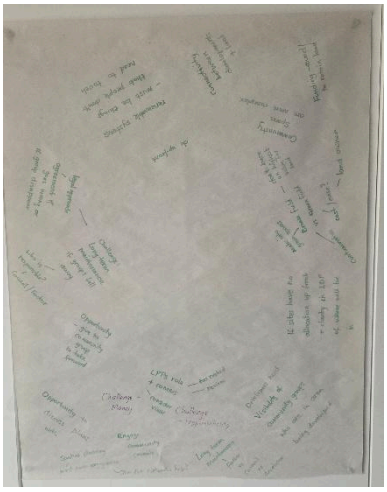
WORKSHOP FLIP CHART IMAGES

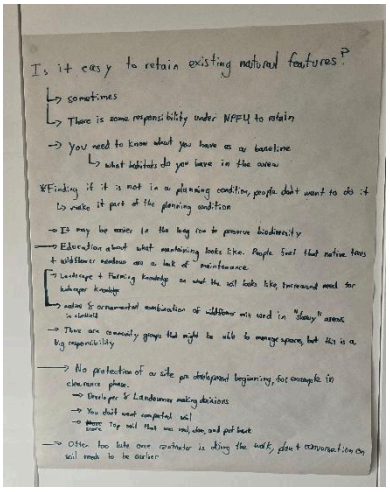












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