

Unlocking Place-Based Investment in Green & Blue Infrastructure



GREEN FINANCE DEVELOPMENT WORK

FUTURE PARKS ACCELERATOR PROGRAMME

NATURAL ENVIRONMENT INVESTMENT READINESS FUND



Vision for Plymouth: Ocean City (of) Nature



Wider Strategic Vision for Plymouth

Plymouth City Council has committed to a Net Zero Action Plan in line with the Plymouth Charter and has committed to becoming carbon neutral by 2030, along with setting various nature targets.

Strategic priorities

Climate Change Mitigation

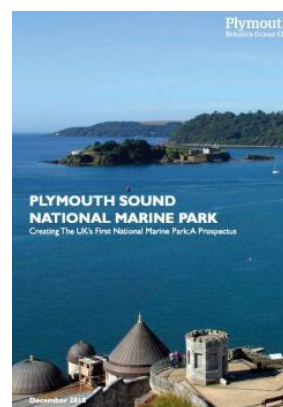
Flood Risk Mitigation

Sustainable Revenue Generation

Natural Asset Conservation

Engagement and Access to Nature

Delivery Frameworks



Ocean City
Nature

Ocean City Nature: Theory of Change

To align strategy across the city, PCC has established a strategic governance vehicle, “Ocean City Nature”, which aims to align governance and catalyse investment at scale in a co-ordinated manner.

Ocean City Nature

Vision

A replicable, scalable funding ecosystem for investment in green and blue assets and sustainable enterprises delivered through a public-facing entity delivering direct environmental benefits, vital services, boosts to the local economy, a sense of place - all catalysing further innovation.

Strategic Outcomes

Parks deliver more services, moving from liability to asset

Recognition of value from beneficiaries of ecosystem services

Green before grey
– NBS solutions considered first

Growth of the green and blue economy

A catalyst for change, proof of concept & public-facing entity communicating Plymouth’s vision

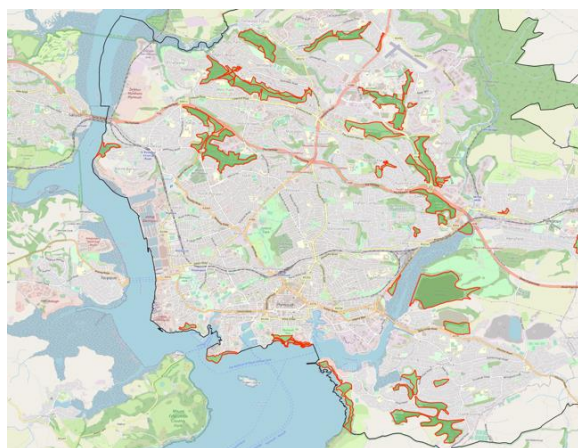
Unlocking Place-Based Investment in Green & Blue Infrastructure in Plymouth



Plymouth City Council (“PCC”) has been working to unlock investment into parks and open space since 2020 through the Future Parks Accelerator (“FPA”) programme and in partnership with Finance Earth (“FE”).



Future Parks Accelerator is a collaboration between the National Lottery Heritage Fund, National Trust and the Department of Levelling Up, Housing and Communities (DLUHC).



Mapping highlighted both opportunities for nature based intervention and key areas in need of investment to mitigate / adapt to the climate crisis.

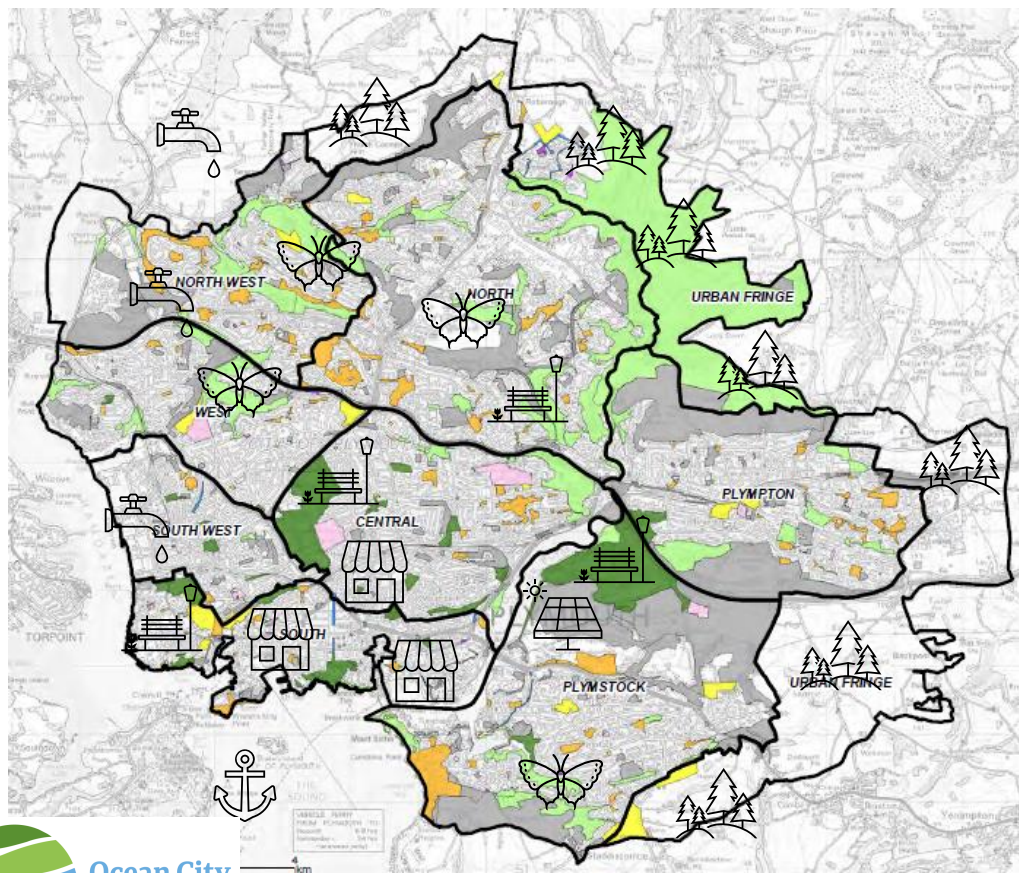


Through this partnership, PCC has identified a number of natural capital based opportunities, and prospective operating / financing models through which to unlock them, spanning Plymouth’s Green and Blue infrastructure. Examples include:

Nature Based Opportunities	Prospective delivery model
37 Biodiversity Net Gain offset sites	Habitat Banking Vehicle
>£20m of Sustainable Urban Drainage interventions	Multi-beneficiary Outcomes Payment / Environmental Impact Bond.
20ha+ suitable for Seagrass Restoration with the National Marine Park	Multiple-Benefit Tokenisation
1900ha Community Forest spanning urban fringe	Woodland Carbon Fund & Community Ownership models

Strategically Coordinating Opportunities Across Plymouth




























The Opportunity mapping exercise has identified a significant variety of opportunities for investment in “blue” and “green” infrastructure across Plymouth.




Opportunity	Icon
National Marine Park	
Parks Estate	
Biodiversity Pilots	
BIDs	
Community Forest	
Renewable Energy	
Sustainable Urban Drainage	



Opportunity Impact Matrix

Funding vehicles and opportunities	Financial scale	SDGs	Carbon reduction	Benefits for PCC Green Estate	
				Job creation	Funding for parks estate
Enterprise Investment Fund	£ → ££	 	● ○ ○	● ● ●	● ○ ○
Multi-Asset Fund	££ → £££	 	● ○ ○	● ● ●	● ● ●
Parks Property Management Vehicle	££ → £££	  	● ○ ○	● ● ●	● ● ●
Habitat Bank Vehicle	££££	   	● ● ●	● ● ●	● ● ●
Carbon Fund	££ → £££	  	● ● ●	● ○ ○	● ● ●
Renewables Fund	£££ → ££££	   	● ● ●	● ○ ○	● ● ●
BID and Blue Bond	£ → ££	  	● ○ ○	● ● ●	● ● ●
Parks Management Vehicle	££ → £££	   	● ○ ○	● ● ●	● ● ●
EIB	£££	 	● ○ ○	● ○ ○	● ● ●

£ <£5 million
 ££ £5-25 million
 £££ £25-50 million
 ££££ £50+ million

 Potential for development

● ○ ○ Less direct benefit
 ● ● ○ Material direct benefit
 ● ● ● Significant direct benefit



Taking a Systems Leadership Approach to Nature Recovery



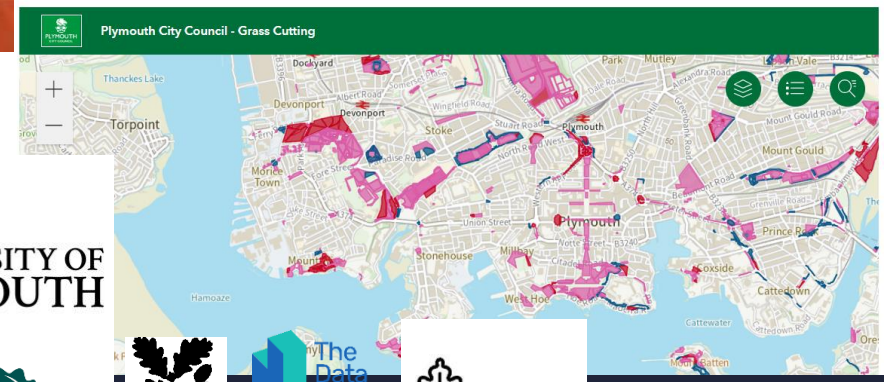
Creating a 21st Century Parks and Nature Recovery workforce



Grass management map

We have a map to show which areas of grass we will be cut and which bits will be left for nature.

- pink areas will be cut on a grass cutting cycle
- blue areas will only have the edges cut
- red areas will be cut once a year as they are designated wildlife meadows.

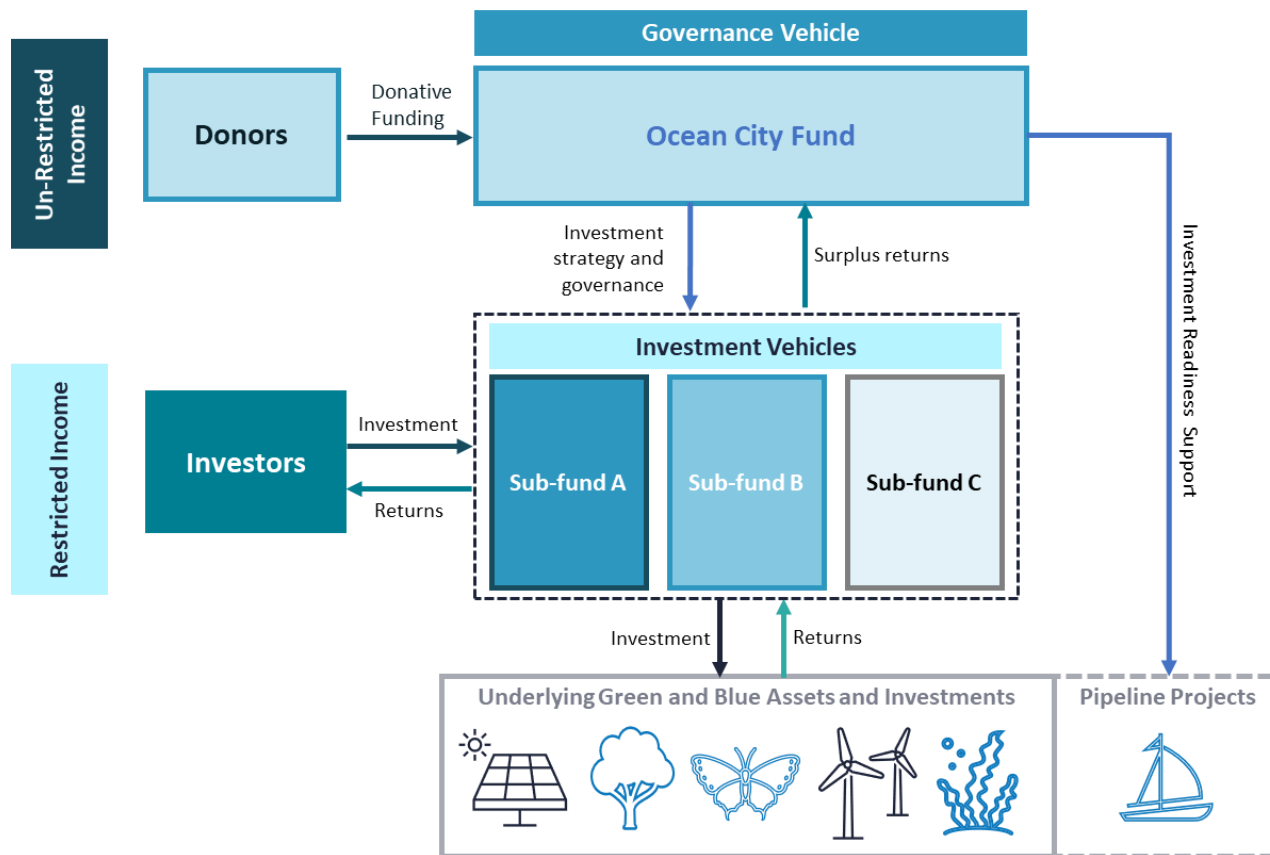


A systems approach to delivering nature-based solutions in Plymouth



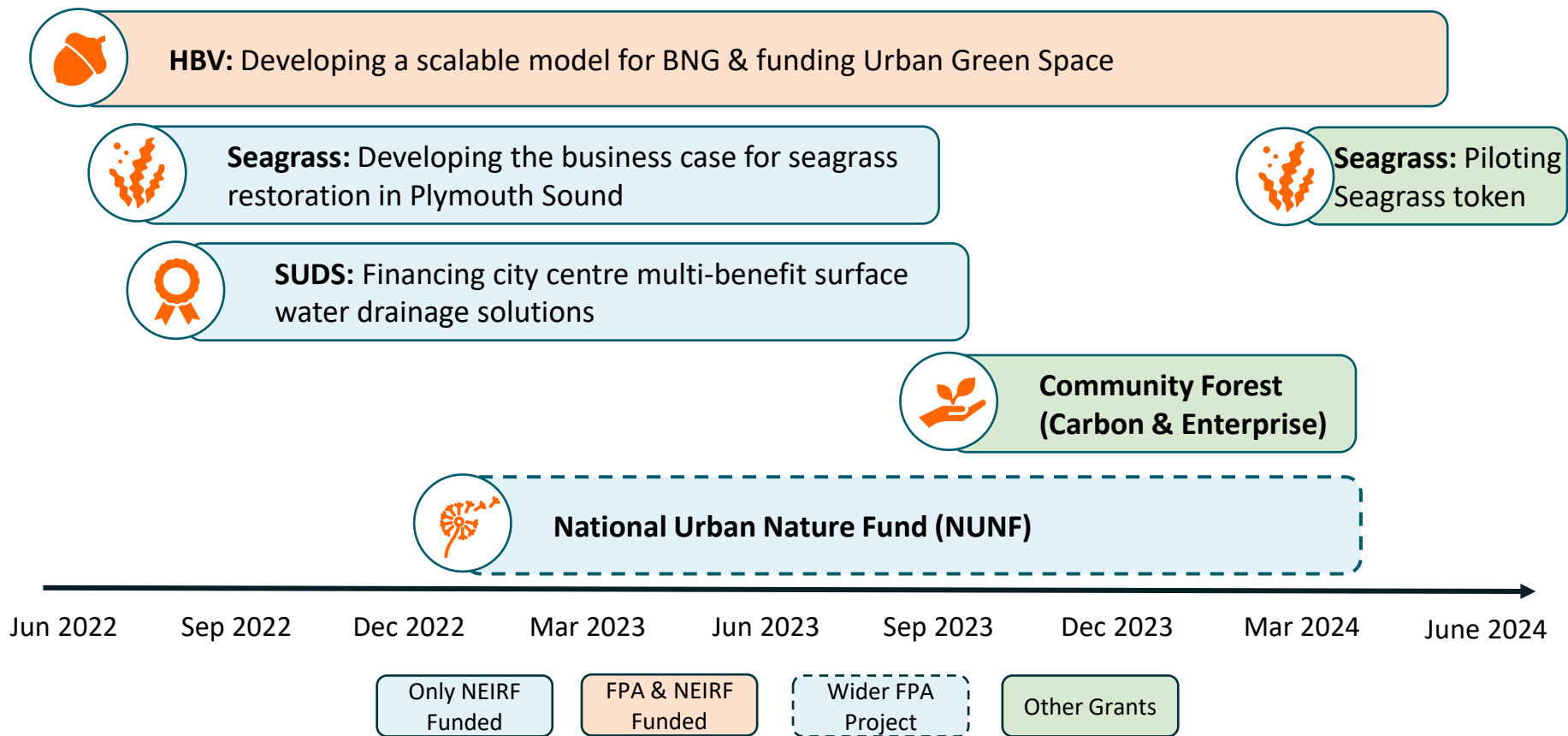
Ocean City Nature Structure

OCN has been established as a Company Limited by Guarantee with the expectation that various special purpose vehicles can be established underneath it.



Natural Capital Project Portfolio in Plymouth

Funded through the FPA programme and through NEIRF 2*, PCC is undertaking a host of natural capital projects under the OCN umbrella in partnership with FE.

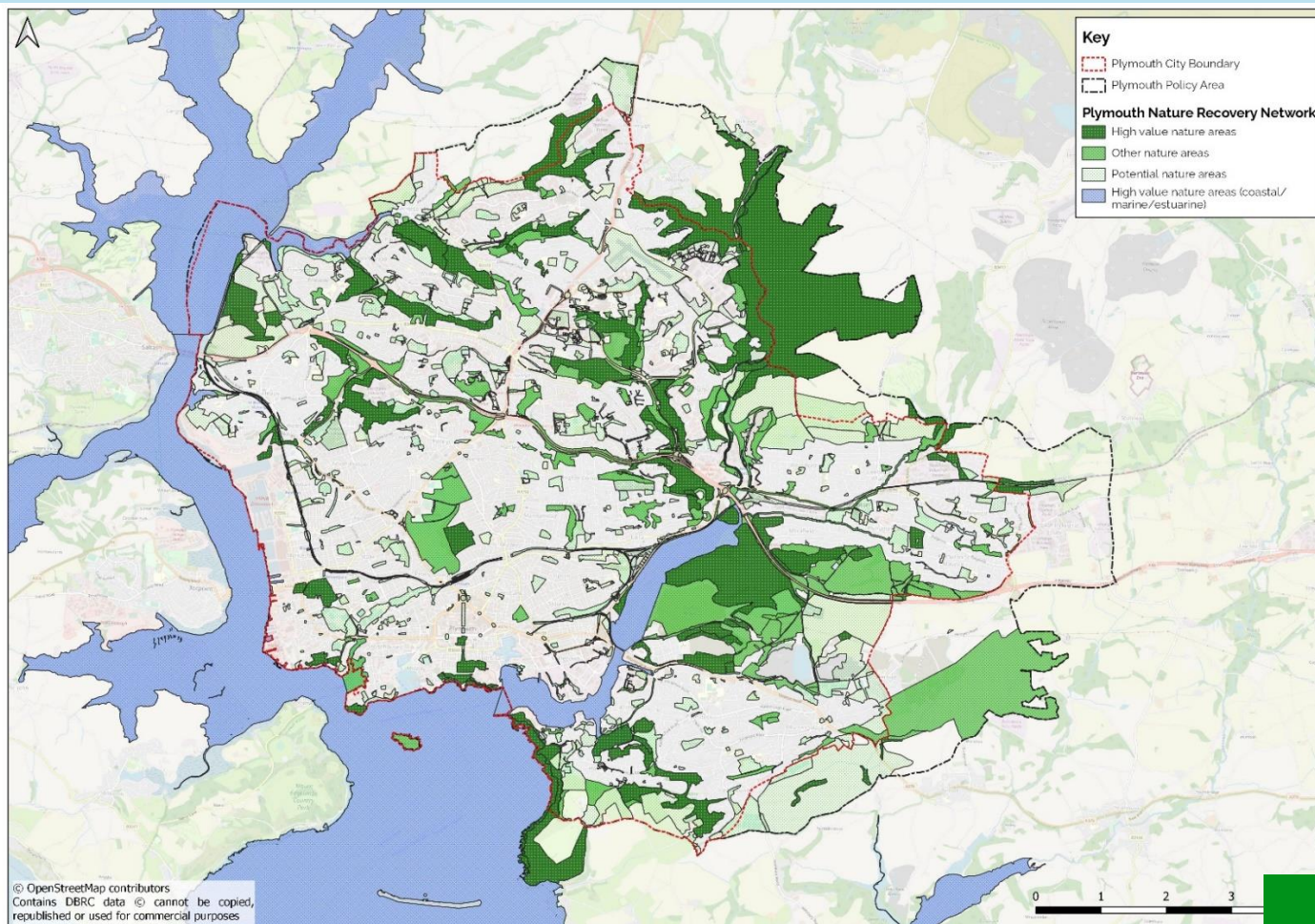


Projects beyond OCN

There are wider strands of work going on that surround the OCN narrative.

- **National Marine Park - £22m investment package, primarily through NLHF Horizons, to invest in country's first NMP.**
- **Rebalance Earth – collaborating around data platform and linking into private sector investment market.**
- **Plymouth Natural Grid – Partnership delivery project with NT. GRCF & NBS for Climate Change (£1m) with NE.**
- **Derriford Community Park – £2.4m new investment for green & built infrastructure acting as Future Park hub delivering against 3 key themes.**
- **Plymouth and South Devon Community Forest – Trees for Climate package £8m until 2025, with proposals for future pipeline of activity.**
- **Green Community Hubs – Partnership delivery project (£0.5m) focused on Neighbourhood Nature Recovery**
- **BRIC – InterReg funded programme to support community resilience to flooding in our most at risk, deprived communities**

By 2030, Plymouth will be locally celebrated and globally recognised as an engaged, nature-rich Ocean City.





Plymouth's Habitat Banking Vehicle



What is BNG? (1/2)

Mandatory BNG for all major developments under TCPA¹ is expected to come into force in January 2024 in England with the implementation of the Environment Act 2021².

Pre-development



Post development



Net Loss



No Net Loss



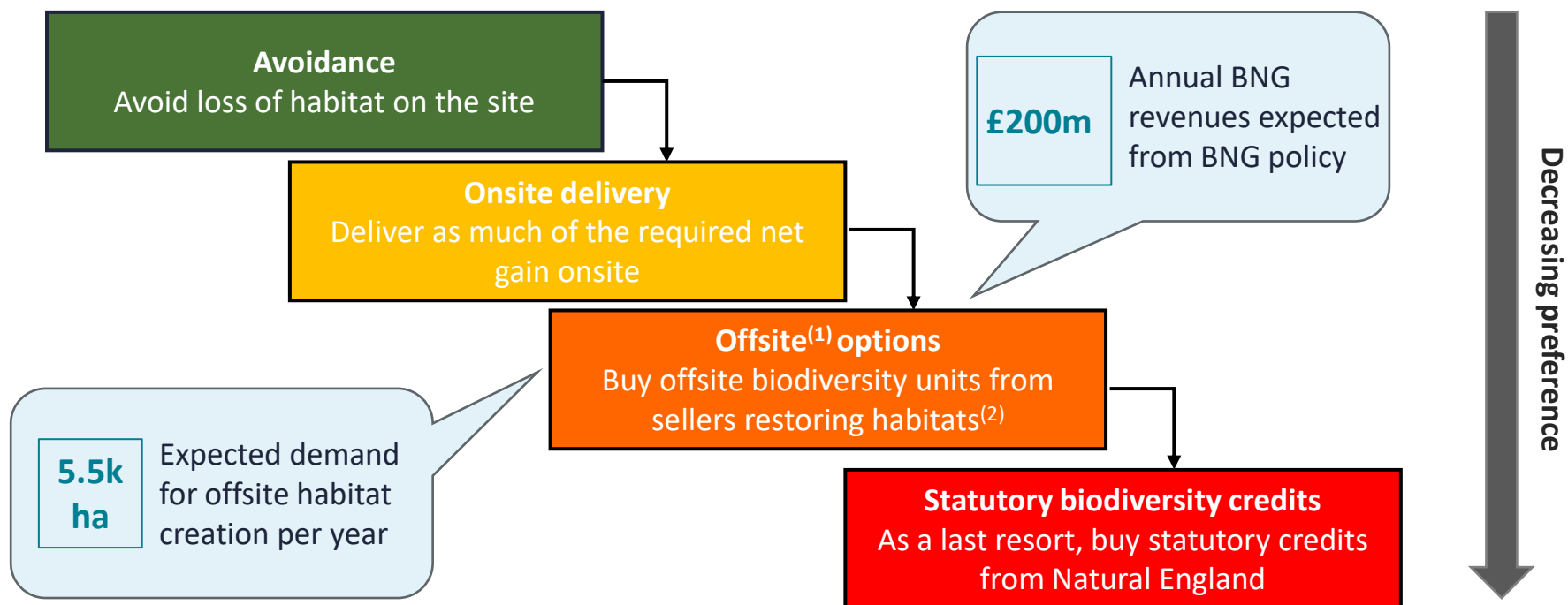
Net Gain

On site

Off-site

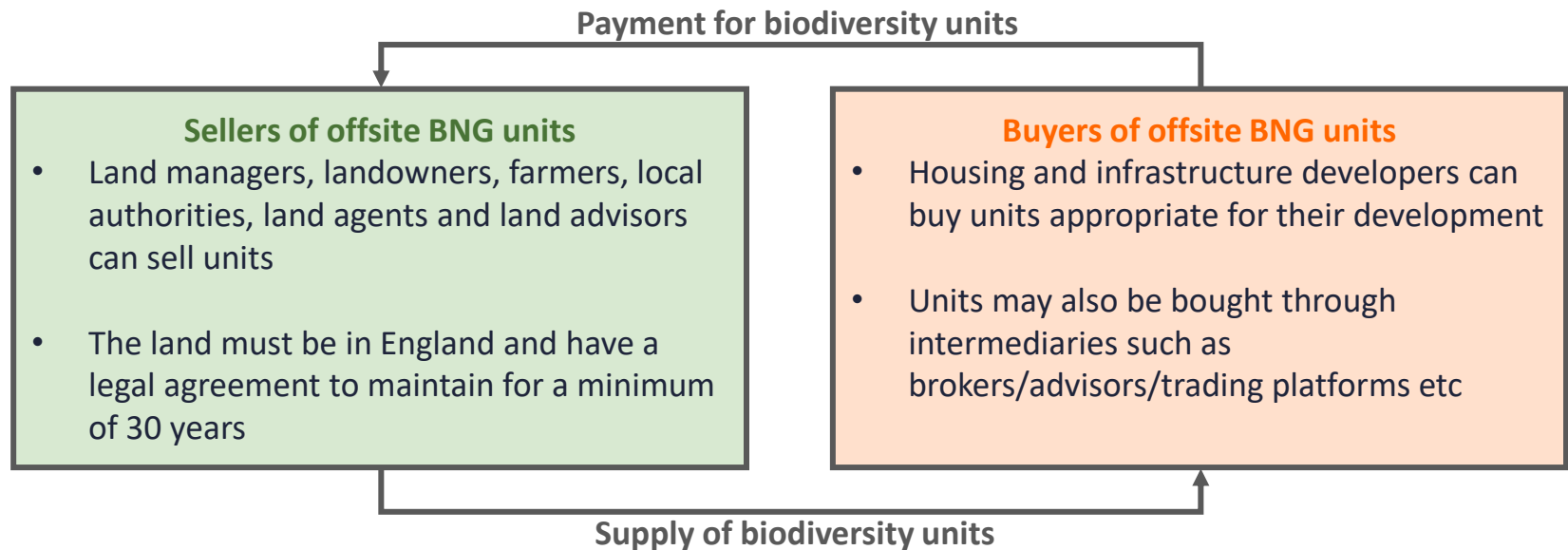
What is BNG? (2/2)

Developers must follow the mitigation hierarchy and deliver biodiversity net gain onsite as far as possible.



BNG Market Overview

In the offsite BNG market, developers are buyers of biodiversity units and land managers may act as sellers of these units. BNG is currently a nascent market & is expected to grow with the implementation of the legislation.



Binding legal agreements through a conservation covenant

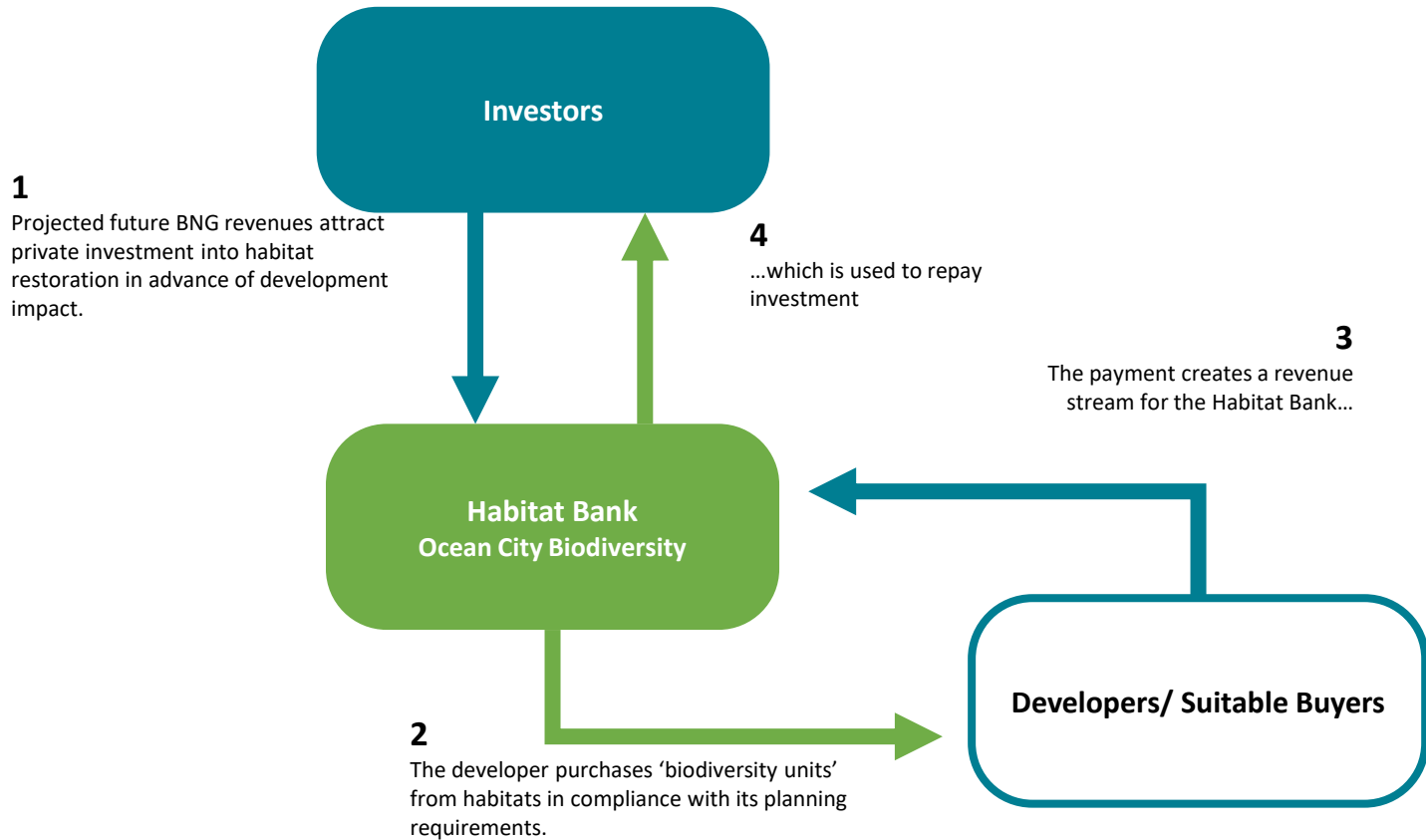


Units registered on the BNG registry



Local authorities approve planning applications & may monitor projects

Habitat Banking Model



Measuring biodiversity units

The Biodiversity Metric can be used to measure biodiversity value and through this, offsite biodiversity units available for sale can be estimated.

Area	Area being restored (in hectares)
X	
Habitat Distinctiveness	Between 0 (very low) to 8 (very high)
X	
Habitat Condition	Between 0 (n/a or other) to 3 (good)
X	
Strategic Significance	Between 1 (low significance) to 1.15 (high significance)
X	
Temporal Risk*	Discount rate of 3.5%; applied for years remaining until target state
X	
Difficulty Risk*	10% (very high difficulty) to 100% (low difficulty)
X	
Spatial Risk	Location of offsite provision (local or otherwise)
=	
# of biodiversity units	Difference between baseline and post intervention value of biodiversity units results in the number of biodiversity units available for sale in the market

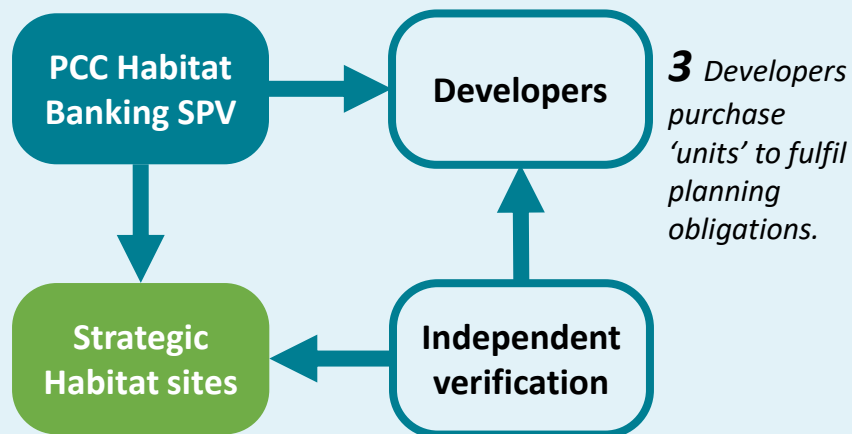
BNG and Habitat Banking in Plymouth

Funded through the FPA program and NEIRF Round 2, PCC assessed the opportunity to deliver BNG on Council-owned sites to unlock benefits for both nature and communities.

- Under the Environment Act 2021, developments are required to provide an overall 10% uplift in Biodiversity (“Biodiversity Net Gain”/ BNG”).
- PCC has developed a *Habitat Banking Vehicle* to enhance habitats across the city, and to provide BNG units for developments with support from FE and FPA.
- The companies have received Cabinet approval and expect to begin trading from Q1 2024.

The Habitat Bank will provide ‘off-the-shelf’ offsets to unlock development and deliver high quality habitats:

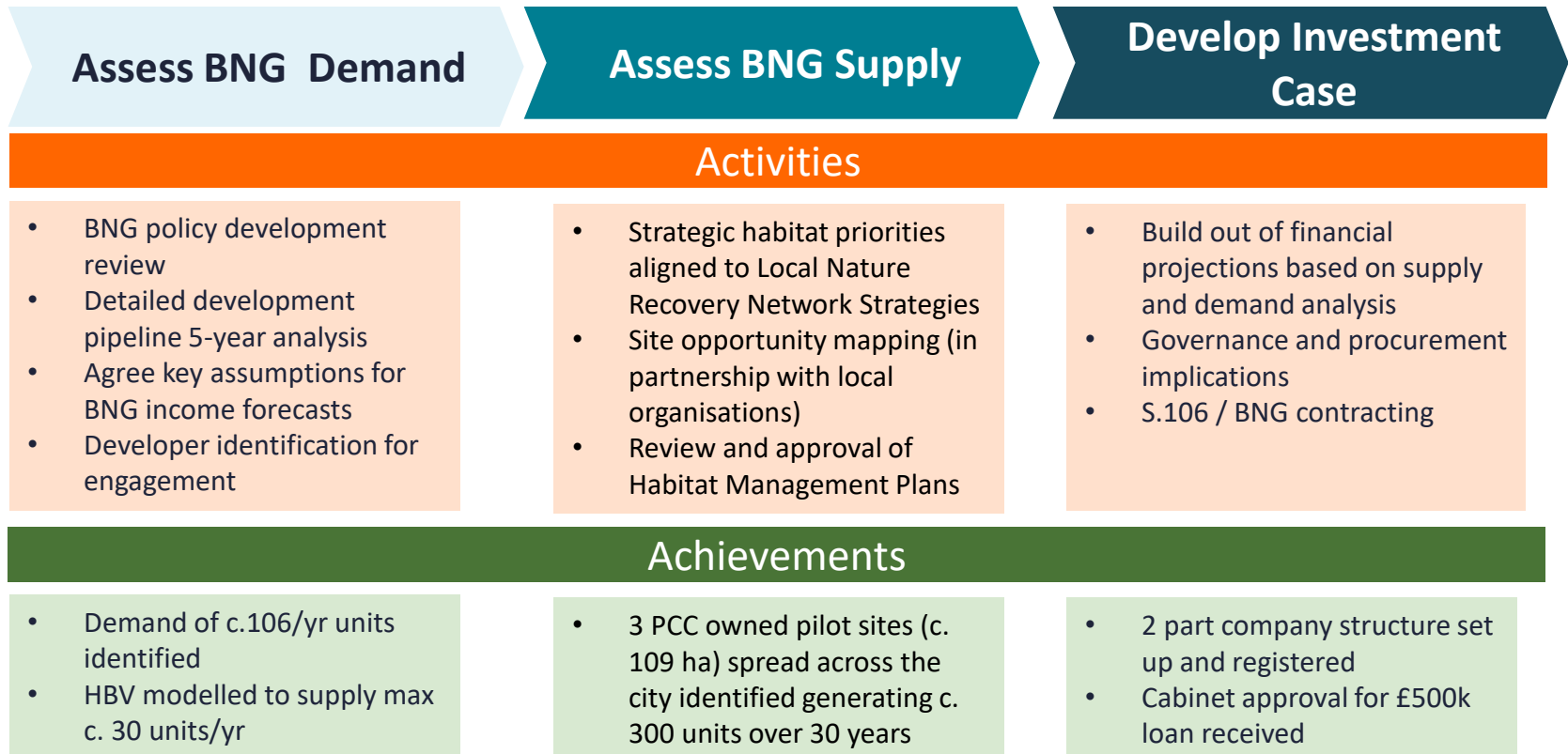
1 PCC creates habitat sites across the city.
Delivery is funded by private investment.



2 Both development and habitat sites are independently verified.

Opportunity Assessment Process & Milestones

The process to develop a habitat banking project requires an assessment of BNG demand and supply opportunities.



BNG Offsetting Principles

The Principles have been developed as part of a stakeholder consultation process and are currently in the stage of being finalised.



ENVIRONMENTAL

1. Adhere to the mitigation hierarchy
2. Deliver high-quality habitats
3. Maintain and protect long term.



SOCIAL

4. Maintain and enhance equitable public access
5. Account for costs of public access and engagement
6. Mitigate socio-economic distortions



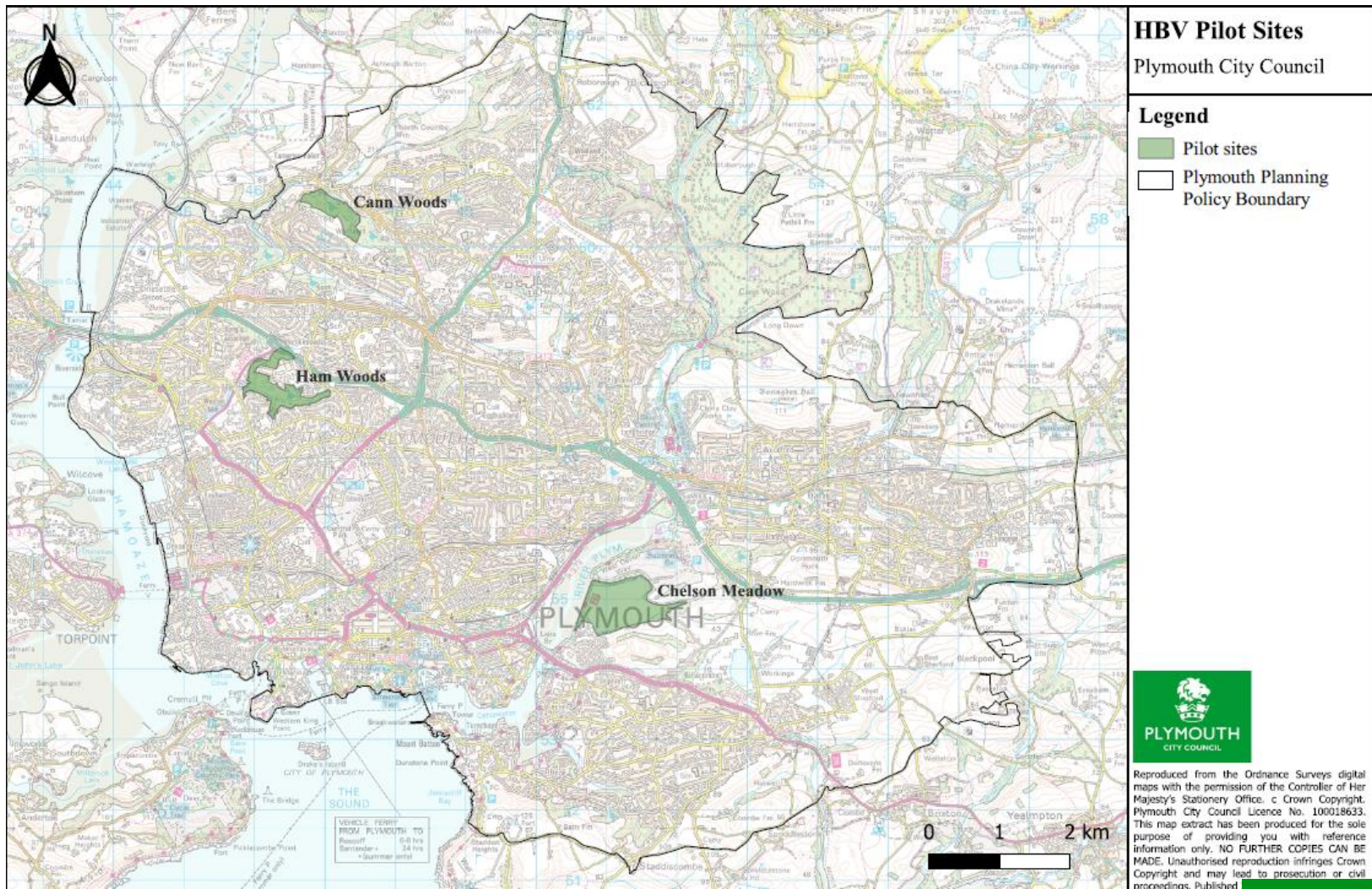
ECONOMIC

7. Provide cost-effective solutions for developers
8. Offer fair returns to investors
9. Support the local restoration economy

FOUNDATIONAL PRINCIPLES

10. Ensure that additionality is achieved
11. Create proactive, joined-up approach to offsetting
12. Ensure routine monitoring and measurement using clear and measurable metrics.
13. Create a robust governance framework
14. Be transparent and accountable

Selected Pilot BNG Supply Sites (1/2)



Selected Pilot BNG Supply Sites (2/2)

Three pilot habitat bank sites, comprising a variety of habitat types, have been selected for the first phase of BNG implementation in Plymouth.



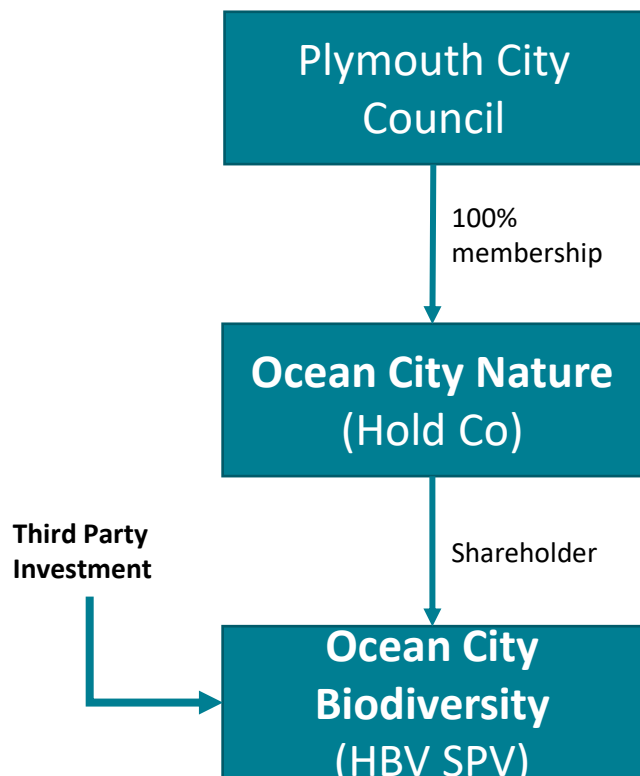
	Chelson Meadow	Cann Woods	Ham Woods
Size	51ha	23ha	35ha
Mgmt type	PCC managed		
Habitat types	Lowland meadow, neutral grassland, bramble & mixed scrub	Neutral grassland, blackthorn, bramble & mixed scrub, lowland mixed deciduous woodland	Modified & neutral grassland, bramble & mixed scrub, lowland mixed deciduous & wet woodland

Interventions Grassland: Annual cut, ground prep, seed sowing, topping, undesirables control

Scrub: Scrub thinning, scalloping, bramble clearance/control, watering

Woodland: Woodland thinning, coppicing, ride creation/ management, restocking

Company Structure



Unitary Authority

Governance role: Ultimate control over business plan and strategic direction of vehicle.

Governance Function: Green Finance Board

Company Limited by Guarantee

Strategic vehicle for HBV continuity beyond HBV and other Green Finance Activity. Distribution and reinvestment of surpluses

Governance role: Decision making over operational objectives including sign off of sales

Governance Function: Board of PCC representatives, supported by economic and environmental stakeholders

Company Limited by Shares

Operating and Investment vehicle for three pilot sites.

Governance role: Operational only, majority of decisions reserved for HoldCo/PCC. Time limited.

Governance Function: Operational board, 3rd party Investor representatives.

BNG and Habitat Banking in Plymouth

Key facts and figures

- 109 hectares across 3 pilot sites, delivering expected 277 Biodiversity Units
- £0.5m capital investment derives £5.3m revenue to PCC through Management Agreement over 30 year period (average £176k p.a.)
- Endowment able to cover 35 years project life

Assumptions at this stage of modelling

- £25k assumed starting price for HB & LB units – detailed pricing strategy in progress
- 10% redundancy rate for HB & LB units
- BU Sales strategy blend of Habitat and Land Banking sales
- Sales complete Year 12

Key Challenges and Barriers

The innovative nature of the project and uncertainty around BNG implementation resulted in several challenges many still fully unresolved

Market Uncertainty

- As a new market there is considerable uncertainty around supply, demand and pricing of Biodiversity Units. In particular it is hard to identify demand for off-site units in LPA areas
- While uncertainty is a natural part of early market development it is critical that when liquidity is low, project developers have chance to minimize losses & withdraw from market ahead of sales

Policy uncertainty

- **Delayed policy announcements and uncertainty** around BNG, including **ambiguity on staged sales** and enforcement have complicated the implementation of the project and challenged stakeholder confidence.
- Uncertainty around **how responsible bodies will function and how conservation covenants will be prepared** impacted the nature and content of legal agreements being produced for the project.
- A **lack of established benchmarks** to learn from resulted in delays due to the **need to develop tailor-made solutions** and upskill various stakeholders.
- **Limited guidance of appropriate tax treatment/advice** for the sale of BNG units and the creation of the habitat banking structure introduces unnecessary risk

Key Learnings & Recommendations for success

1 Journey length and intensity

- It is easy to underestimate the journey necessary to unlock a new way of working – Green Finance – and the **mindset shift**, training and upskilling required to bring all stakeholders along on the journey
- The procurement of external advice such as legal and tax advice can be time-consuming and may delay project timelines and deliverables if not managed carefully from the start.

2 Stakeholder engagement

- While the project may be delivered by a core team, a Project Sponsor at a senior enough level to influence is key.
- A wide range of stakeholders from internal teams need to be co-opted to reach investment readiness.
- Identify key internal stakeholders early in the project as possible and ensure they are fully included in project development to ensure decision making is as smooth as possible.
- Adaptability and identifying strengths of other stakeholders to positively influence building the case

3 Building Integrity and Common Purpose

- Delivering urban green space enhancement through BNG requires LA's to balance public access to the site while delivering the target habitat condition – Cost this into delivery models!
- Build principles at early stage by consensus and continue to refer back to them at key points
- LA's are tuned into place-based priorities and community need/ response and are therefore well placed to shape this to align with these aspects and city strategies

How Researchers can help?

1 Impact on land value?

- How are new Nature and Climate markets and changes in planning and corporate obligations disrupting the traditional land base markets?

2 Data – taking our data to the next level and interrelationships between ESS delivery

- Vegetative data – analysis to understand management activity and impact on vegetative assemblages
- Fauna – backing up statistical significance of impact of habitat improvement
- Interaction between habitat type/ condition and carbon seq./ storage and habitat type/ condition & hydraulics and water quality

3 Habitat Management – efficacy of approaches

- Have interventions positively impacted fauna species e.g. woody debris dams and freshwater species groups
- Etymology – gap in literature around this which could be delved into re: specific habitat management improvements

4 Social value – Monitoring and reporting the impact of Nature Recovery on Socio-Economic Indicators.

- Researching existing tools and co-designing required approach to this inter-relationship – taking account of temporal and spatial factors – for measuring impact of Plymouth's Local Nature Recovery Plan.

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Ocean City
Nature