

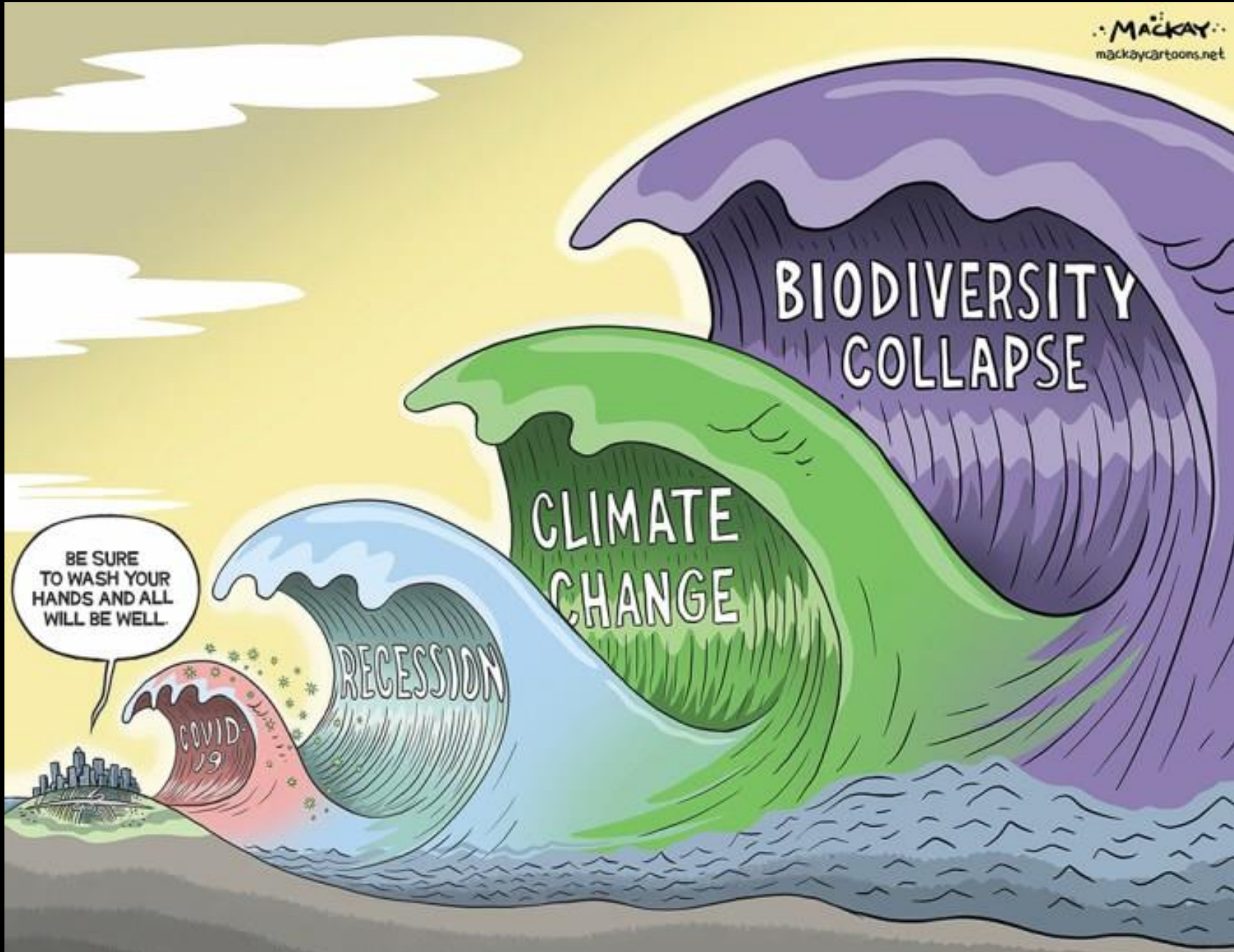
introducing 'Project Verdant'...

a blueprint for
building nature-based
climate resilience

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working for you





BE SURE
TO WASH YOUR
HANDS AND ALL
WILL BE WELL.

COVID
19

RECESSION

CLIMATE
CHANGE

BIODIVERSITY
COLLAPSE

context for action



worldwide ecological crisis:

- entering the **6th mass extinction event** in history but 1st caused entirely by humanity
- **70% global loss of animals** in just the last 50 years

UK performing very badly on nature:

- 60% bioabundance loss across priority species since 1970s
- 99% loss of wildflower meadows in the last 100 years
- 50% hedgehog loss since 2000 (97% decline since 1950s)
- 90% of wetland habitats lost over the last century
- Zero true wilderness areas left in the UK (contiguous and sizeable habitats untouched by humans)
- 13% tree canopy cover in the UK – with only half of this being native species – 38% average across EU
- 50% hedgerow loss since World War II
- 80% of peatlands in a damaged and deteriorating condition
- 100% of rivers are polluted and only 1 in 7 in an ecologically “good” condition, according to the EA
- half of entire England badger population has been culled due to bovine TB – causing localised extinctions

context for action



market failures:

- our financial markets are ‘maximising’ systems (seeking profit & growth), whereas nature is an equilibrium seeking system (striving for balance)
- the costs of dealing with environmental degradation are ‘off the books’ – i.e. externalised
- no-one is willing to pay for the ‘public goods’ provided by nature, but ***ecosystem services do have a value***

broader reasons for project:

- resilience to climate change impacts (flooding & excess temps);
- carbon sequestration;
- AQ improvements,
- requirements imposed by the Environment Bill (BNG, nature recovery, etc);
- reconnection of people with the natural world;
- mental and physical wellbeing (social value);
- improved sense of place & community cohesion (social value); and,
- to address the changing landscape of town and city centres

what is 'Project Verdant'?

Funding streams

- Corporate social responsibility funds
- Donations from individuals
- Pension funds
and other ESG avenues to be explored
- Grant funding
- Environmental Land Management Scheme
- Carbon and biodiversity offsets

Special Purpose Vehicle

A social enterprise
(or similar)

Operational resources

- 'Friends of' groups
- Community groups
- Local school projects
- Volunteer groups
- Charitable organisations
- Conservation groups

Outcomes and benefits

Natural capital return
and social value



what is Project Verdant?



basic model

- district-wide in focus – possibly beyond
- not solely a council initiative – although council should play a pivotal role
- success requires partnership working – bringing together different stakeholders
- needs a ‘special purpose vehicle’ – i.e. legal entity created for a specific purpose

benefits

- independent organisation (arms-length from the council)
- access to wider networks, funding sources, opportunities

Before and after

Urban greening through tiny forests, green rooves/trellises/walls, & street trees

Before



After



Allotments/planters/community gardens

Before



After



Permeable surfaces and nature-based solutions for flood risk reduction

Before



After



Diverse habitats with wildflowers, woodlands, ponds

Before



After



Wildflower verges for insect recovery

Before



After



Clean waterways

Before



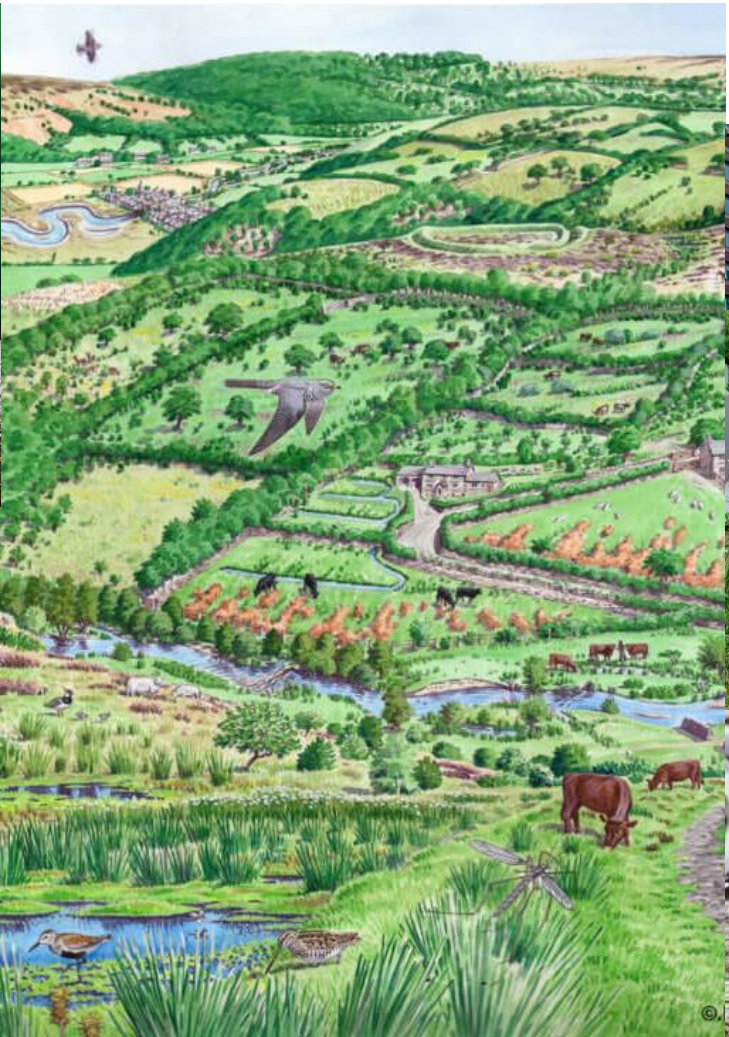
After



climate resilience & adaptation



natural environment



what work has been done so far?



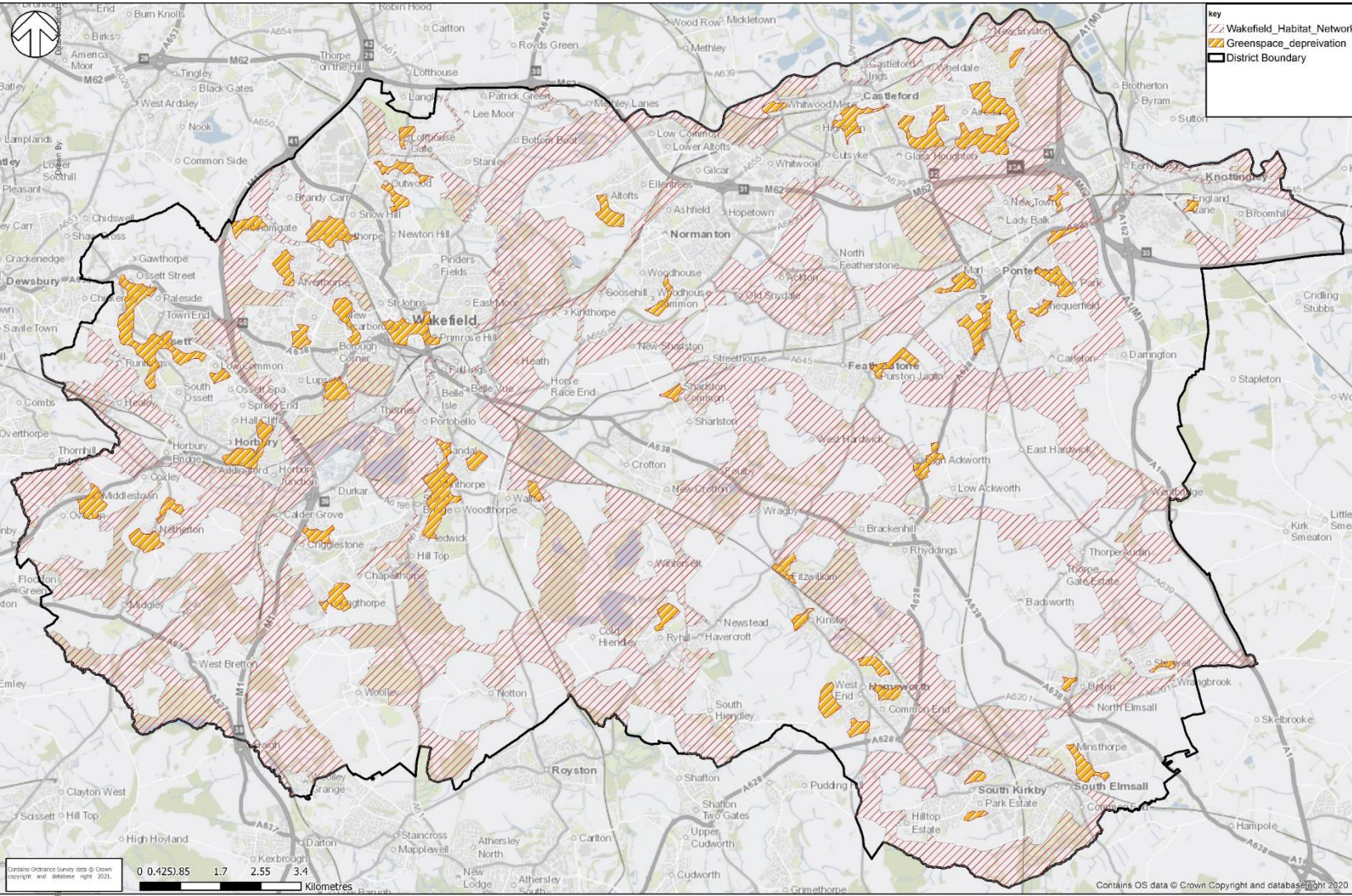
documents reviewed

- The Wakefield Council Vision to 2025;
- Wakefield District Local Plan 2036
- Wakefield District Economic Strategy 2018-2023;
- People Strategy 2019-2022;
- Wakefield Council Climate Action Plan;
- The Northern Forest and White Rose Forest initiatives;
- Local Biodiversity Action Plan;
- Yorkshire and Humber Regional Biodiversity Strategy;
- Wakefield Greenspace Strategy (2014; draft);
- Leeds City Region Green and Blue Infrastructure Strategy;
- West Yorkshire Transport Strategy

spatial datasets collated

- OS Mastermap Greenspace layer;
- Ancient Woodland Sites;
- Priority habitats;
- Protected sites (such as SSSIs), Local Wildlife Sites, Nature Reserves etc;
- Public Rights of Way Network;
- CORINE Land Cover map 2018;
- Wakefield Greenspace Needs Assessment;
- Wakefield Deprivation maps (natural areas; play areas; outdoor play);
- Wakefield land ownership (including greenspace polygons);
- The White Rose Forest Partnership GIS information

example dataset – greenspace deprivation



other actions taken so far



1. stakeholder engagement
2. **assessment of natural capital tools**
3. **experimentation with social value measurement 'TOMs' framework**
4. measurement of benefits
5. hypothetical case study applied to local scenario
6. review of potential delivery models
7. engagement with orgs operating in the same space

nature-based climate solutions

stakeholder engagement



climate adaptation – SWOT analysis



strengths

1. strong **political focus** on climate change
2. **existing partnerships**, e.g. White Rose Forest
3. time is right – with **people beginning to see the urgency**

weaknesses

1. too much ‘strategising’ – **not enough action**
2. lack of strong **national policy** – especially in the built environment
3. specific **barriers beyond local authority control**
4. difficulties in persuading people to embrace **nature-based SuDS**

climate adaptation – SWOT analysis



opportunities

1. council-led '**Project Verdant**' seen as a good potential model to explore
2. new **food tech & farming techniques** – tied to proactive partnerships with farmers & land managers
3. better funding potential – worsening climate risks mean **financial institutions are 'waking up'**
4. employment opportunities from **capitalising on growth in linked sectors**

threats

1. seriousness of **issues being underestimated** – e.g. crop failure & stranded assets
2. risk of '**lock-in**' due to poor practices in the now
3. **lack of coordination & foresight**

natural environment – SWOT analysis



strengths

1. existing **pockets of good work**
2. networks of **grass roots community groups**

weaknesses

1. people have become completely **disconnected from nature**
2. **public understanding is lacking** when it comes what's needed
3. availability and breadth of **baseline data is poor**
4. council practices still damaging to biodiversity – e.g. **tree felling & excessive mowing**
5. **effectiveness of comms** is inadequate
6. efficiency of existing **partnership models** needs to be improved

natural environment – SWOT analysis



opportunities

2. **ecological crisis declaration** means the council must take action in key areas
3. capitalising on **rewilding movement** can capture people's imagination
4. **carbon offsets** can be tied to ecological restoration
5. **river restoration** can have a huge array of co-benefits
6. community action can change attitudes – with a **dedicated website** seen as essential

threats

1. conflation of **biodiversity net gain (BNG)** with nature recovery
2. lack of **connectivity** across habitats
3. misconceptions of **nature's current health** – biodiversity, soil, watercourse, invasive spp.

Ladybalk Lane – case study

NATURE TOOL

Version 1.0 BETA

United Kingdom

SUMMARY RESULTS FOR ADVANCED CHANGE ASSESSMENT - PROJECTION

LadyBalk Lane Park Case Study

Policy Priorities Based On Default Priorities for England | Assessment By WSP

Ecosystem Services & Benefits

Change Score

Potential Score

Completeness Score (Max=10)

Policy Priority

All Objectives Met?

Achievements

People Score	+9%	33%	10	N/A	G
Aesthetic Values	-0%	57%	10	L	N/A
Sense of Place	+9%	52%	10	M	N/A
Air Quality Regulation	+11%	27%	10	H	N/A
Carbon Storage	+5%	55%	10	M	N/A
Cooling & Shading	+10%	53%	10	M	N/A
Erosion Protection	+15%	51%	10	L	N/A
Flood Regulation	+10%	45%	8	H	N/A
Water Quality Regulation	+8%	50%	10	L	N/A
Pest Control	+22%	30%	10	M	N/A
Pollination	+23%	35%	10	M	N/A
Food & Fish - Commercial	+0%	0%	10	M	N/A
Food & Fish - Community	>100%	1%	10	L	N/A
Water Availability	-0%	49%	10	M	N/A
Wood Production	+0%	0%	10	H	N/A



wsp

TITLE: PROJECT VERDANT

FIGURE NO: LADY BALK PARK: FUTURE LAND COVER

another good example – Moortown Park



SPV organisational structure - options

Company Limited by Shares	Company Limited by Guarantee	Community Interest Company	Charity Incorporated Organisation	Co-operative	Community benefit society
Typical Corporate Legal Structure	Used for not-for-profits	Used for Social Enterprises	Structure designed specifically for charities	Co-operatives that serve member interests	Run for the benefit of community rather than members
Limited liability for shareholders	Limited liability for any member guarantee	Liability same as any limited company	Limited liability for trustees and members	Limited liability for members	Limited liability for members
Fast, simple and cheap	Fast, simple and cheap	More complex and timely and costly	Very complex, timely, costly	Very complex, timely, costly	Very complex, timely, costly
Asset lock would have to be drafted into articles	Asset lock would have to be drafted into articles	Compulsory Asset lock	Compulsory Asset lock	Asset lock would have to be drafted into articles	Asset lock – either voluntary or statutory
Strict filing requirements and regulation	Strict filing requirements and regulation	Strict filing requirements and regulation	Less strict filing requirements and regulation	Less strict filing requirements and regulation	Less strict filing requirements and regulation
Not eligible for charitable status	Eligible for charitable status	Not eligible for charitable status	Eligible for charitable status	Not eligible for charitable status	Eligible for charitable status
Better options for Social enterprises	Consider going forward	Consider going forward	Unlikely to be able take on secured debt	Does not suit potential business model	Not practical option

financial opportunities



- habitat banking and biodiversity net gain



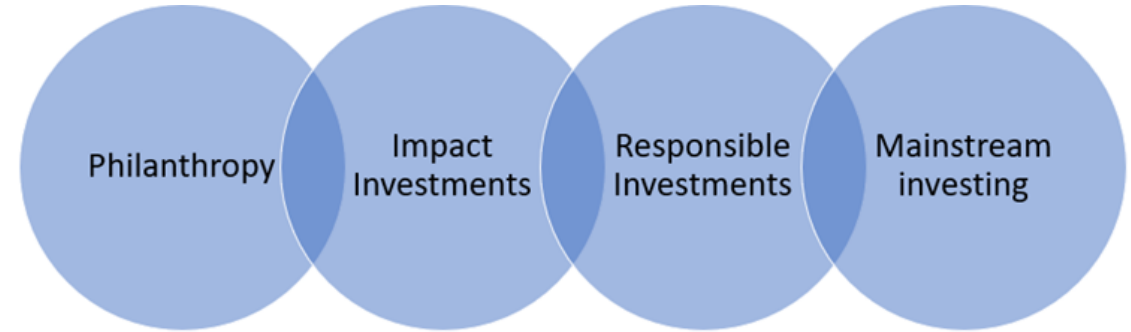
- woodland creation for carbon trading



- catchment scale initiatives



- Green Improvement Districts (GIDs)



Business model			
No business model / Non-revenue generating	Unproven business model unpredictable cash flow	Robust business model / revenue generating activities	
Investment forms			
Grants	Equity	Concessionary Debt	Commercial Debt and equity
Investors			
Trusts & foundations NGO's, Lottery funds	Impacts Investors aligned corporates		Institutional & retail investors

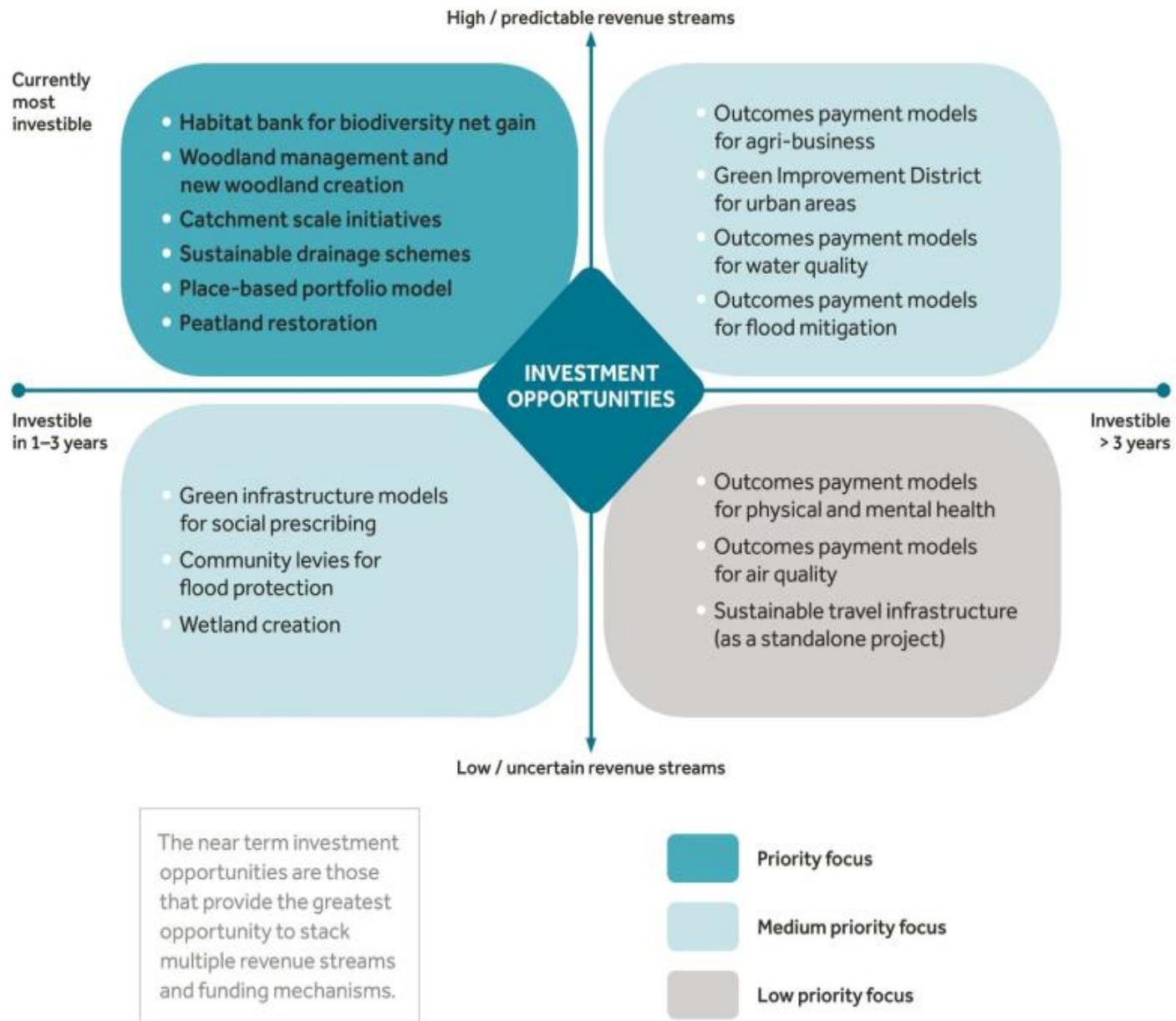
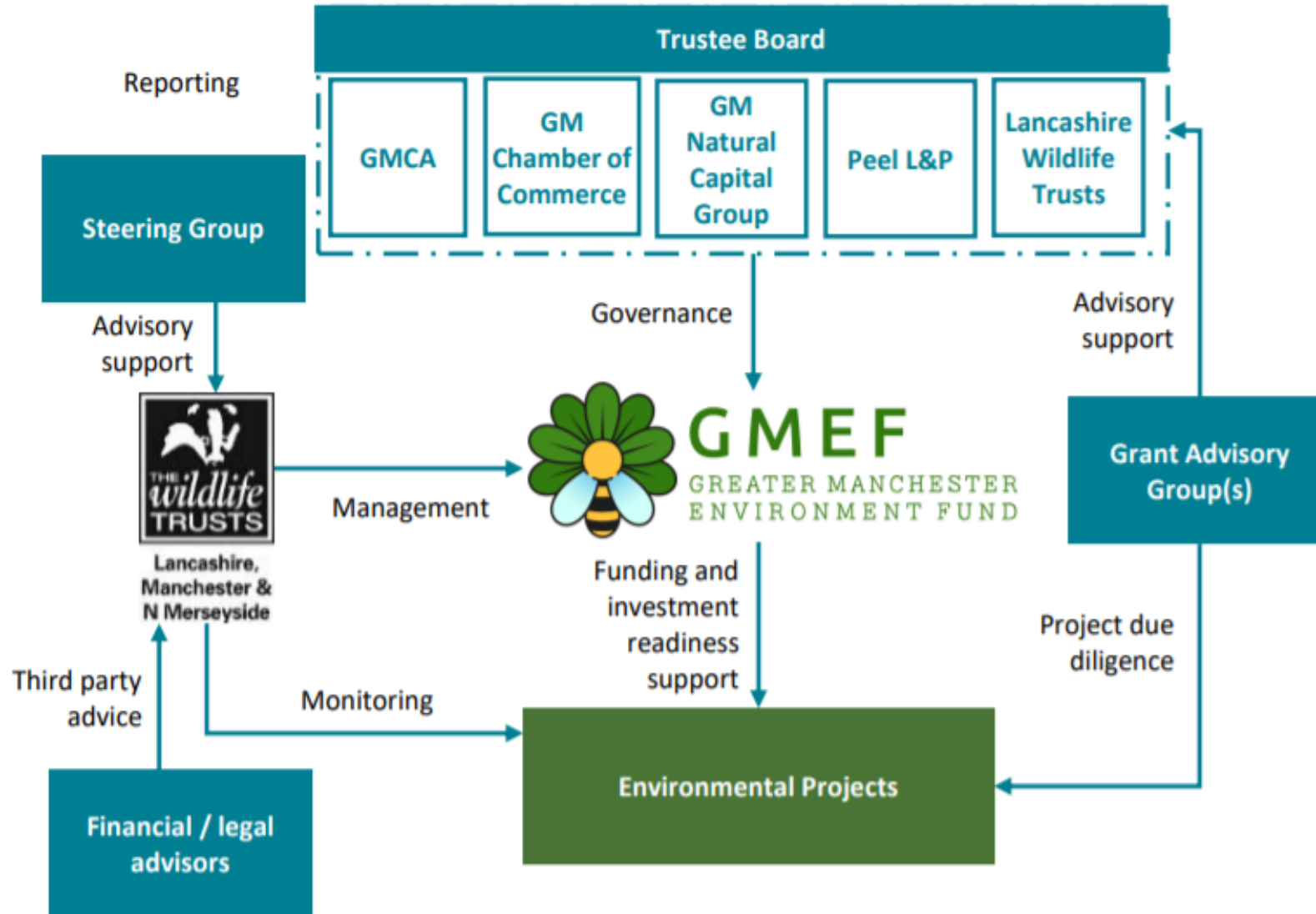


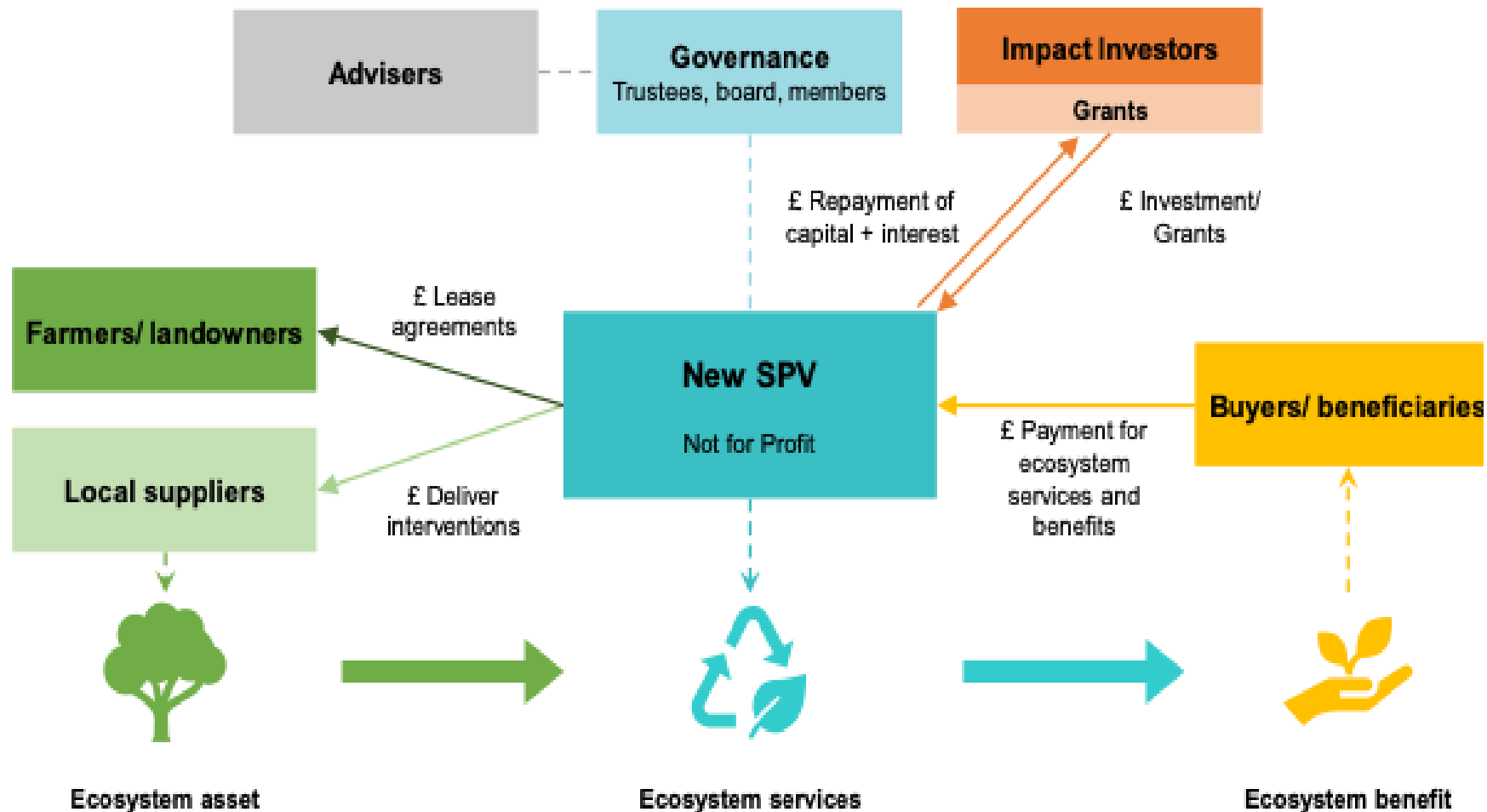
Figure S.3: Investability assessment of a pipeline of potential natural capital project types

taken from Greater Manchester Natural Capital Investment Plan, January 2019

delivery models – GMEF



delivery models – Wyre river catchment



Triodos Bank



next steps



actions needed to deliver Project Verdant

- **options appraisal** & loose programme
- approvals on next steps & **outline business plan**
- agree on **delivery model**, e.g. limited company or community interest company
- create a **multi-agency board** & request funding from members to kickstart project, starting with governance, comms, establishment, etc
- prepare a **baseline natural capital account** for the district
- draft a **natural capital investment plan** to understand the financing opportunities
- **reach out** to critical local partners, including community groups, to gain support
- develop a **portfolio of projects** to sell measurable benefits, demonstrate potential, and attract investment

nature-based climate solutions

thank you

