



Bedfordshire
Local Nature
Partnership

Bedfordshire Natural Capital Project

Next Steps

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What is Natural Capital? What are Ecosystem Services?



- **Natural Capital** = the sum of our ecosystems, freshwater, land, soils, minerals, air and seas.
- **Elements of nature** that directly or indirectly **bring value** to people and the environment
- **Ecosystem Services** = the functions and products from nature that can be turned into benefits

Different types of Ecosystem Service

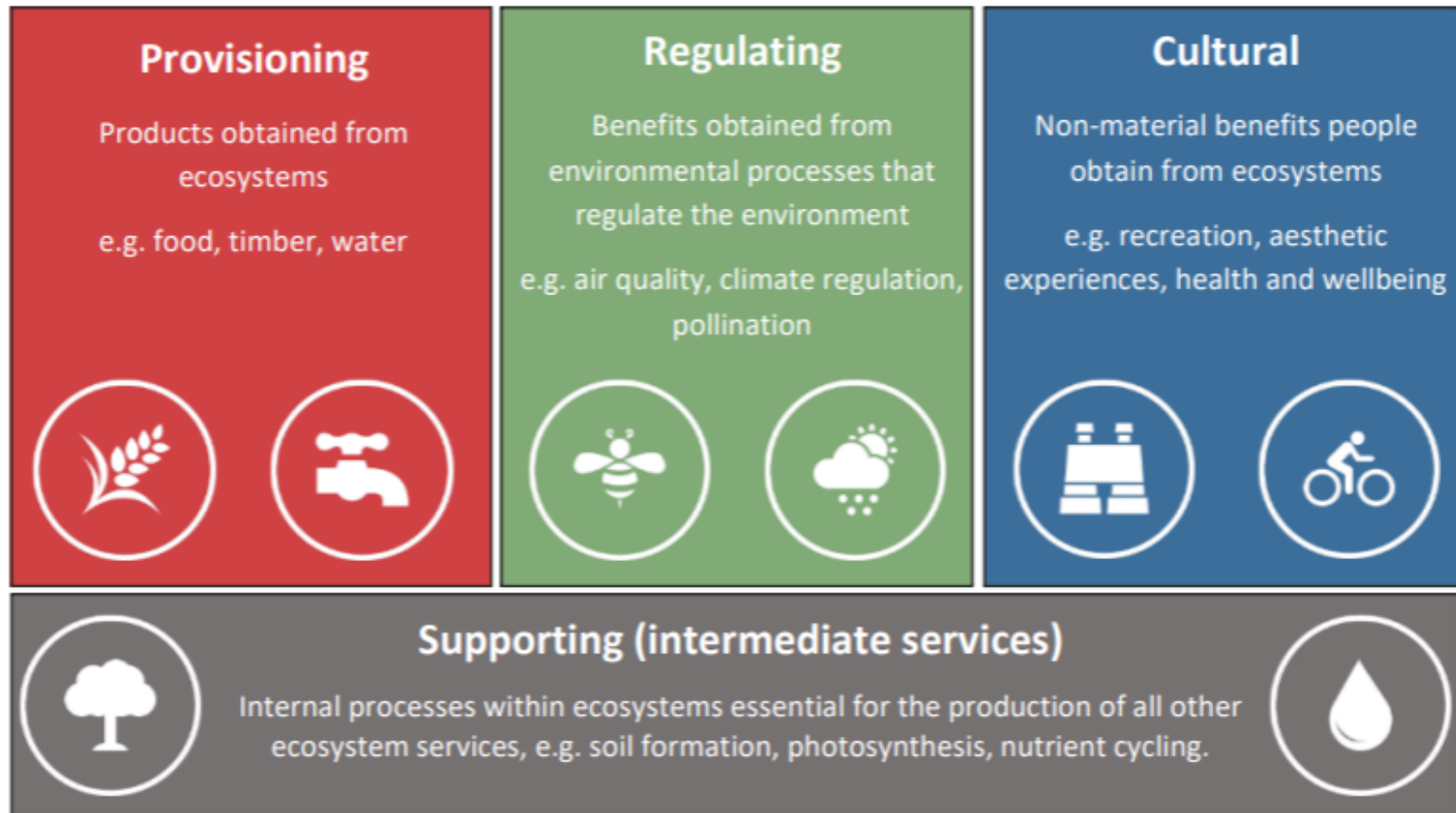


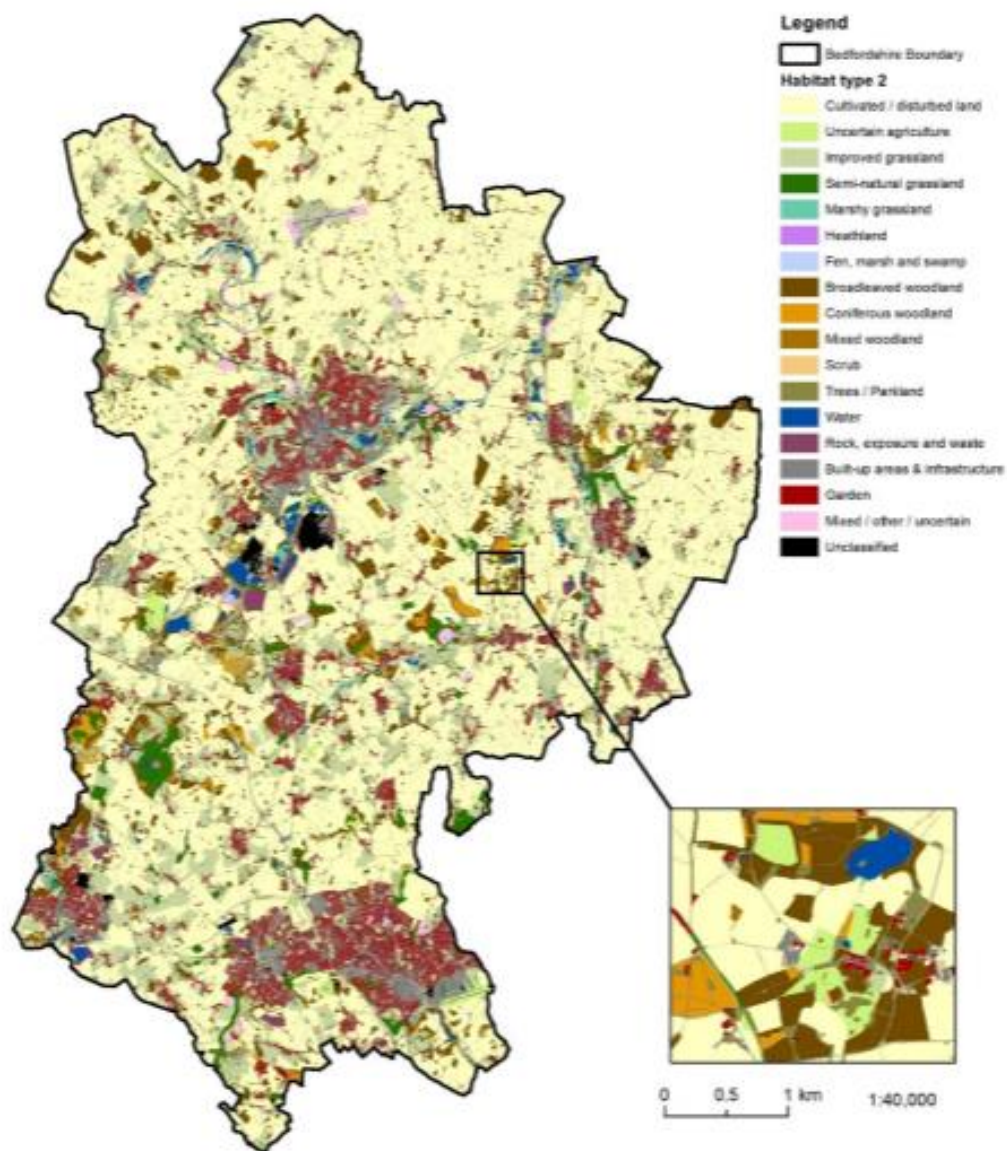
Figure 4. Main types of ecosystem services (based on MA 2005 and ESA 2010)

Why is this approach important?



- Fundamental within **25 Year Environment Plan** – build into decision-making processes and growth plans
- Inform **Biodiversity** and **Environmental Net Gain**
- Inform **Local Nature Recovery Strategies** and Networks
- Inform new **Environmental Land Management Scheme**
- Inform action on **climate change, surface water management, recreation planning** and more.

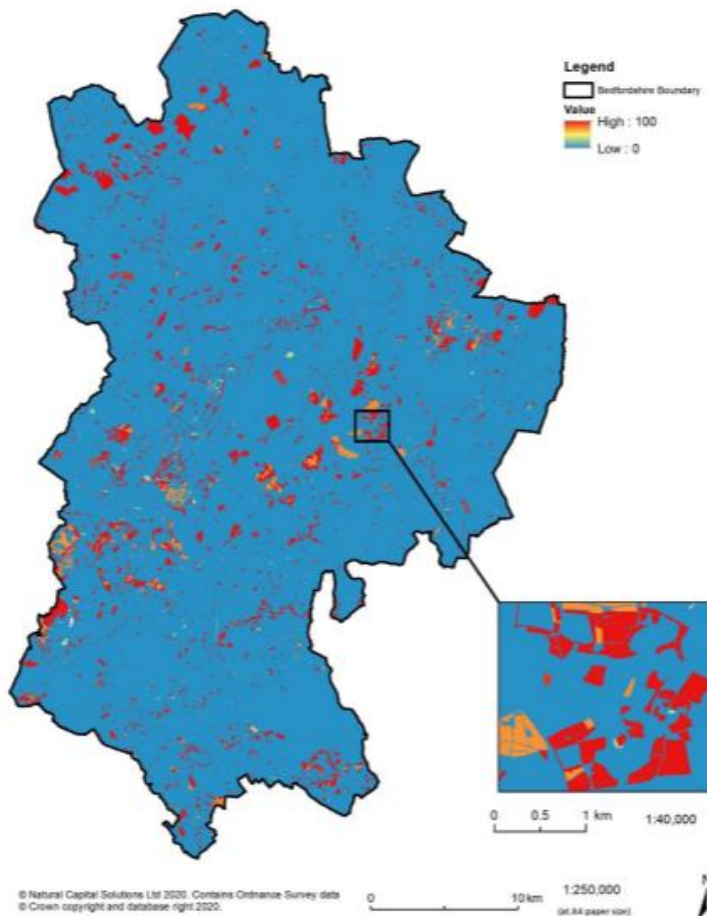
Natural capital basemap



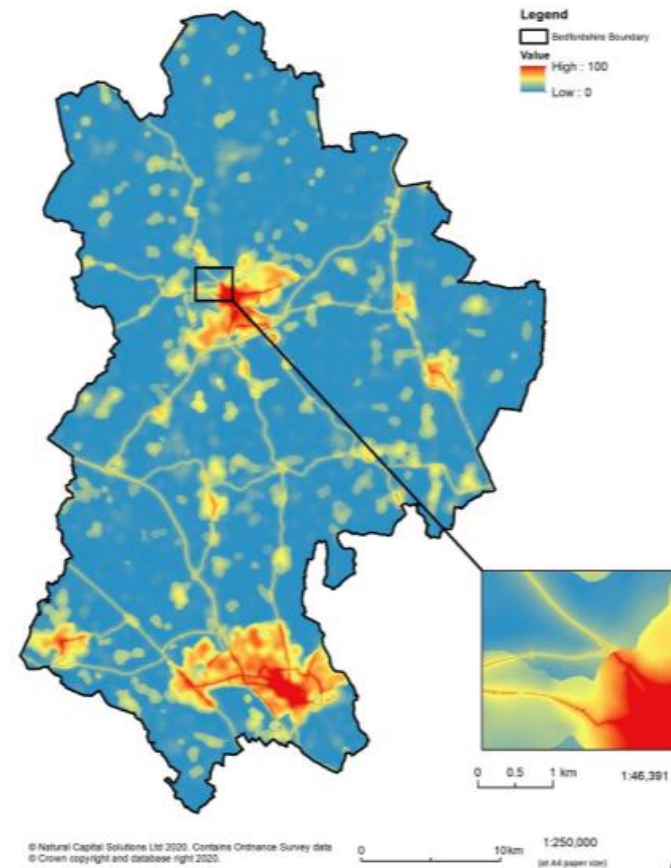
Ecosystem Service Modelling & Mapping – Capacity & Demand



Carbon sequestration capacity



Air Purification Demand



Baseline Ecosystem Service Valuation – the Benefits

Ecosystem service	Annual monetary flow (£ per ha)			
	Luton	Beds Borough	Central Beds	Full region
Area / ha	4,335	47,641	71,553	123,529
Air quality regulation	787	926	598	732
Carbon sequestration	21	37	51	45
GHG emissions from agriculture	-7	-68	-64	-63
Recreation	3,990	560	563	682
Physical health	1,480	203	217	256
Agricultural production	2	24	22	22
Timber/woodfuel production	5	10	16	13
Total value:	6,274	1,692	1,398	1,684

Habitat opportunities – Buffers and Stepping Stones

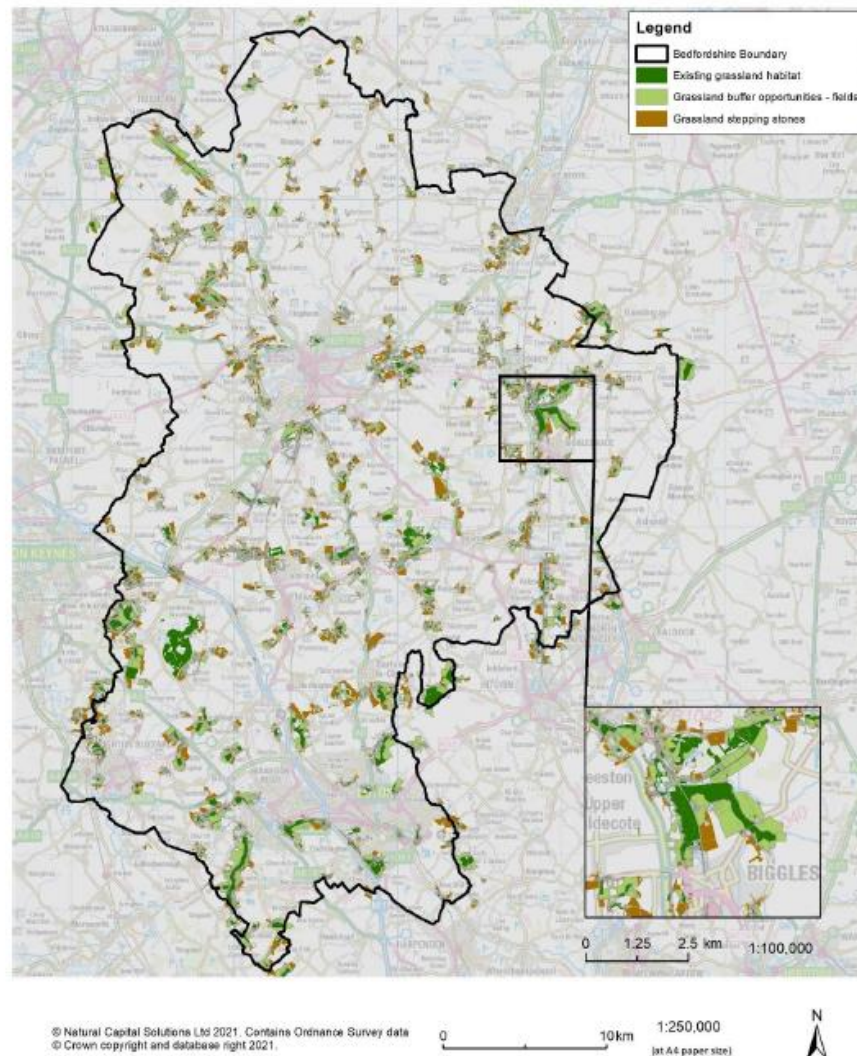


Figure 31 Field scale biodiversity opportunity areas for semi-natural grassland across Bedfordshire.

Water flow regulation opportunity areas

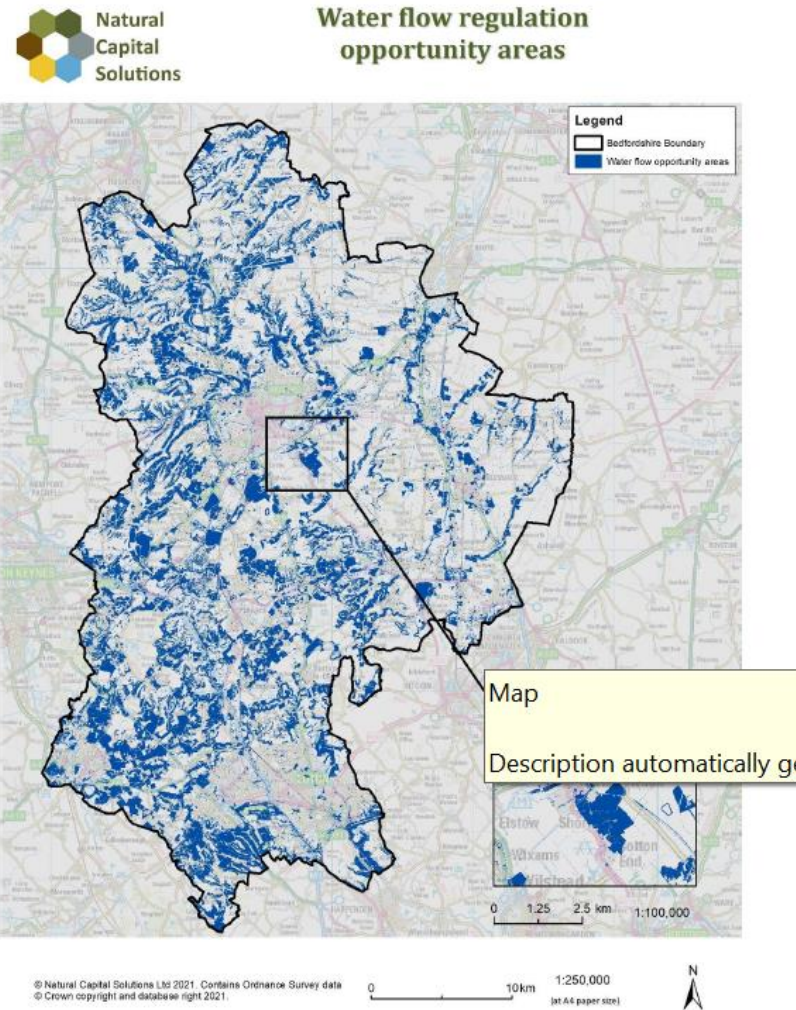


Figure 32 Water flow regulation opportunity areas across Bedfordshire.

Combined ESS opportunitess – new woodland

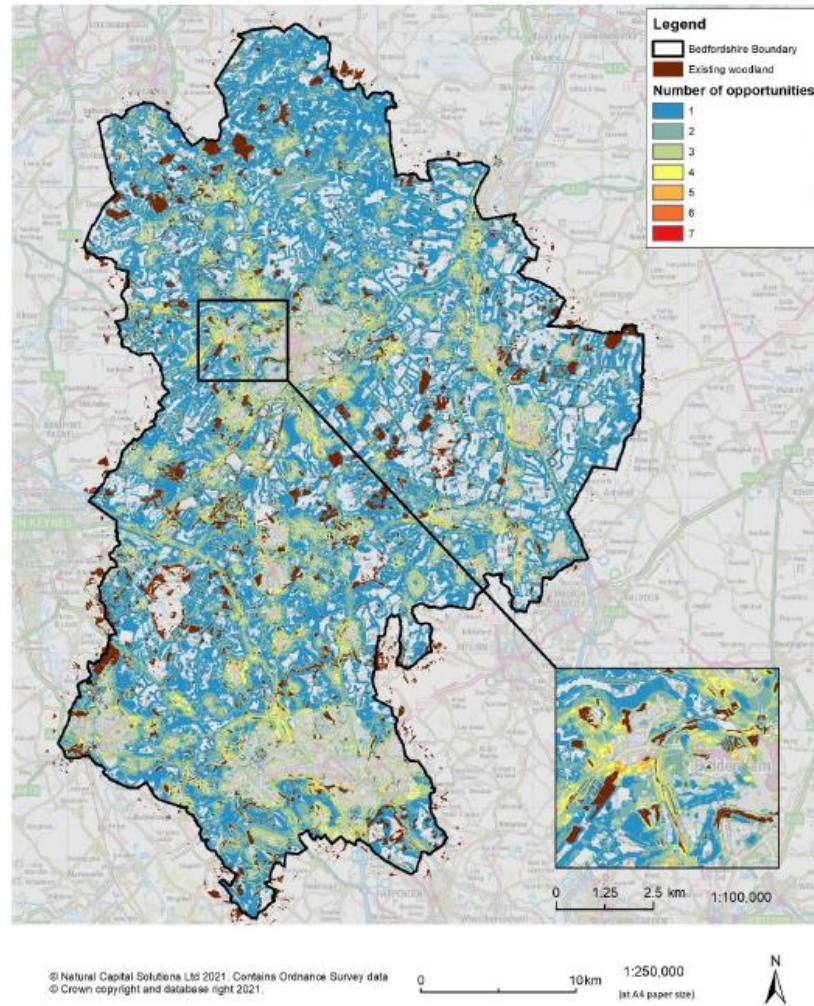
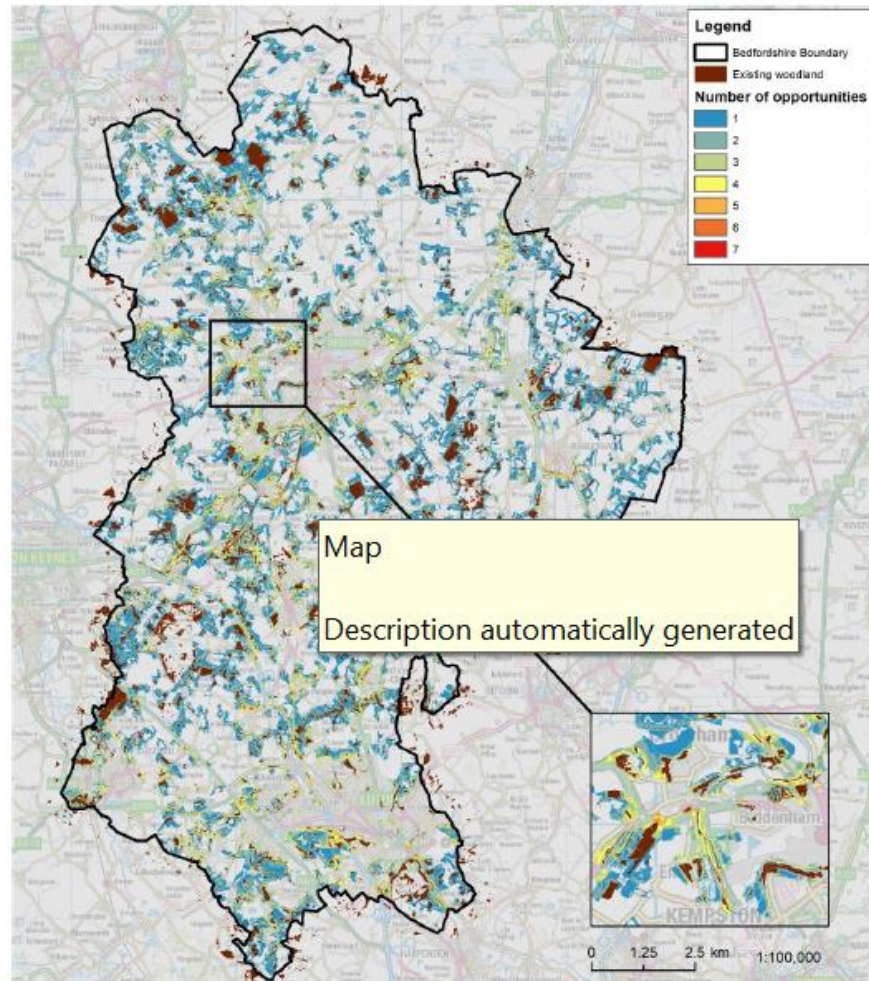


Figure 47 Existing broadleaved and mixed woodland, and combined opportunities for new woodland across Bedfordshire.

Combined ESS opportunities – new woodland (Biodiversity Focus)



Combined opportunities for new woodland - Biodiversity focus



Driving Forward Opportunities

- How to use this evidence base?
- How do opportunity areas correspond with existing / potential projects?
- How do opportunities fit with other strategic priorities?
- How do we ensure Bedfordshire projects have a strategic profile?
- Workshop in February 2022

Opportunities for Semi-Natural Grassland



Opportunities for Water flow Regulation



Air Quality Regulation Opportunities



Access to Greenspace Opportunities



Combined ESS – Opportunities for new woodland

