



# OxCam

## The Green Arc



## OxCam Arc Local Natural Capital Plan

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Oxfordshire Growth Board - September 2020

# The foundations for the “Green Arc”

## The OxCam LNCP can...

- | Provide an **overarching, integrated approach** to identifying environmental interventions, opportunities and risks to plan with partners to deliver **net gain** and **multiple benefits**
- | Provide an **evidence base** - Mapping and evaluating the Arc’s natural capital and ecosystem services to provide a consistent environmental baseline to measure change and plan **meaningful and integrated nature-based interventions**
- | Identify **the environmental, economic and social benefits** that flow from nature – and **explain their worth and potential to support blended finance**
- | **Help to de-risk growth** by enabling environmentally-focused and informed decision making - **facilitating green recovery, project speed and also delivering net zero**
- | **Support cross boundary and partnership working** – common aims, evidence and information

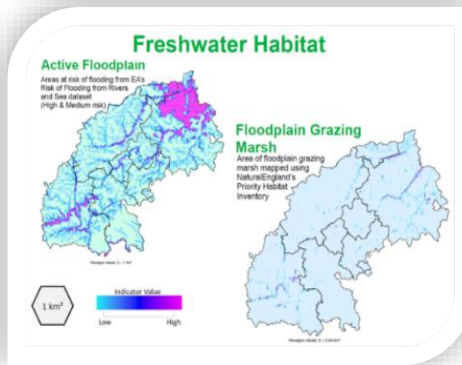
# Collaborative co-creation

**“We have defined and managed stakeholder engagement groups and forums to scope and refine approaches and outcomes for our project”**

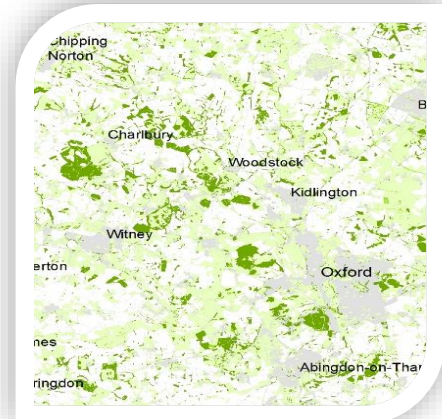




Creating a **Natural Capital Baseline** of asset type, quantity and location.



**Natural Capital Indicator Maps** supporting our baseline highlighting some quality indicators - based on the NE Atlas



Mapping **Ecosystem Services** to show what our natural assets provide

Co-design with partners and specialist review to create a natural capital planning tool

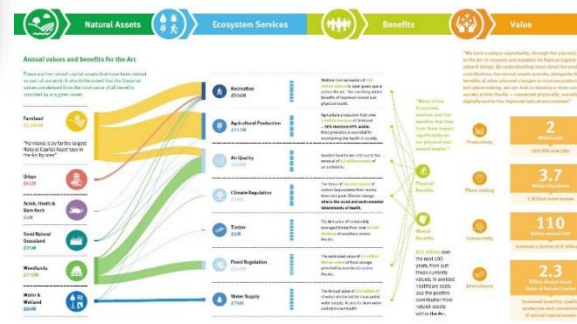


Mapping **Opportunities** and risks across the Arc



**Natural Capital Account** to articulate benefits and values that flow from The natural capital of the Arc

**Investment Toolkit and other guides** to highlight why and how to take a natural capital approach



# A snapshot of value and benefits...



## Annual values and benefits for the Arc

These are the natural capital assets that have been valued as part of our work. It should be noted that the financial values for these assets are derived from the total value of all of the Ecosystem Services benefits provided by any given asset.

**Farmland**  
£1,361M



\*Farmland is by far the largest natural capital asset type in the Arc by area\*

**Urban**

£61M



**Scrub, heath & bare rock**  
£4M



**Semi natural grassland**  
£26M



**Woodlands**  
£767M



**Water & wetlands**  
£89M



**Recreation**  
£507M



Welfare from recreation of 166 million visitors to open green space across the Arc. This can bring added benefits of improved mental and physical health.

**Agricultural production**  
£757M



Agriculture production from over 947,000 hectares of farmland – 77% arable land by area (64% of the annual value) 23% pasture land by area, (livestock accounting for 36% of the annual value). Food provision is essential for maintaining the health of society.

**Air quality**  
£68.9M



Avoided healthcare cost due to the removal of 6.6 million tonnes of air pollutants.

**Climate regulation**  
£21M



The Value of 240,000 tonnes of carbon sequestered from mostly trees and peat. Climate change affects the social and environmental determinants of health.

**Timber**  
£6M



The Net value of sustainably managed timber from over 94,000 hectares of woodland across the Arc.

**Flood regulation**  
£249M



The estimated value of 6.3 million m<sup>3</sup> of flood storage provided by woodlands across the Arc.

**Water supply**  
£79M



The Annual value of 525 million m<sup>3</sup> of water abstracted for clean public water supply. Access to clean water underpins our health.

"Many of the Ecosystem services and the benefits that flow from them impact significantly on our physical and mental health."

**Physical Benefits**

**Mental Benefits**

£21 billion over the next 100 years, from air quality alone, in avoided healthcare costs due to the positive contribution from natural assets within the Arc.

"We have a unique opportunity, through the planned growth in the Arc to protect and enhance its natural capital and the value it brings. By understanding more about the positive contributions our natural assets provide, alongside the benefits of other planned changes to improve productivity and place-making, we can look to develop a more connected society within the Arc – connected physically, socially, digitally and to our natural environment."



Productivity

2

Million jobs

up to 1.2 million new jobs



Place-making

3.7

Million residents

up to 1 million more homes



Connectivity

110

Billion annual GVA

provide new enabling infrastructure to support a further £20 billion GVA PA



Environment

2.3

Billion annual asset value of natural capital

increased quantity, quality protection and connection of natural capital assets

### Ecosystem Service Categories

- Regulating
- Provisioning
- Cultural

### Confidence Key

- High confidence in results. Input data and/or assumptions are based on statistical reports, peer reviewed values or industry standard methodologies.
- Moderate confidence in results. Input data and/or parameters from single source and/or not peer reviewed, or based on sources that are not specifically tailored to this context.
- Low confidence in results. Input data and/or parameters from single source and low level of transferability from original to site.

**£70**  
Billion

The estimated total natural capital asset value in the Arc over 100 years.

**£2.3**  
Billion

The estimated annual value of services flowing from the natural capital assets in the Arc.

# Working with local partners to expand our knowledge base

**We have worked with our local partners to explore:**

The different ways that investment for environmental projects could be obtained from traditional and non-traditional sources

- This included supporting a study that researched and compared current approaches to natural capital investment planning
- And a study that investigated how a Landscape Enterprise Network could be developed in Oxfordshire

Whether the condition of natural capital could be assessed using GIS data

Natural capital is important but on an Arc wide scale it is not practical to complete site surveys

We therefore wanted to understand whether other data could be used to assess condition



# Next steps

- | **Communications and embedding:** step by step guides on creating and using the Local Natural Capital Plan, its evidence base and approaches
- | **Lessons learned and recommendations:** to support change, future LNCPs, capacity building and feed into policy reviews
- | **Testing the approach:** applying to a more local scale and identifying options with multiple benefits