

ICaN Warmley NAZ: Natural Capital Assessments

Natural Economy
Circular Economy
Low Carbon Economy





Warmley NAZ



Uplift in Ecosystem Service Values over 15 Years

Ecosystem service	Present Value (15 Years)		
	Baseline	Post Intervention	Uplift
Air Pollution Removal	£7,900	£8,100	£200
Flood Regulation	£5,400	£5,600	£200
Climate Regulation	£57,200	£57,600	£300
Recreation	£10,636,000	£15,136,000	£4,500,000
Physical Health	£6,480,000	£9,222,000	£2,742,000
Mental Health	£1,568,000	£2,232,000	£664,000
Biodiversity ¹	£1,231,000	£1,374,000	£144,000
Total excluding biodiversity	£18,754,500	£26,661,300	£7,906,700

¹ While the monetary benefits from biodiversity have been quantified and aggregated with the other benefits here for presentational purposes, it should be noted that the valuation likely double counts the supporting role it plays in many other environmental benefits including timber, carbon sequestration and recreation.

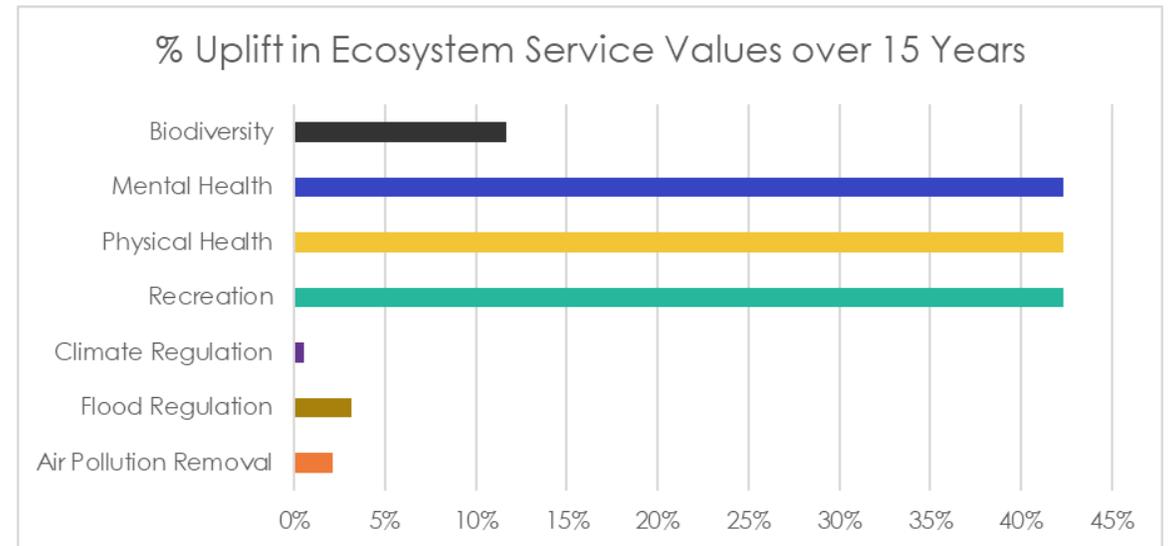
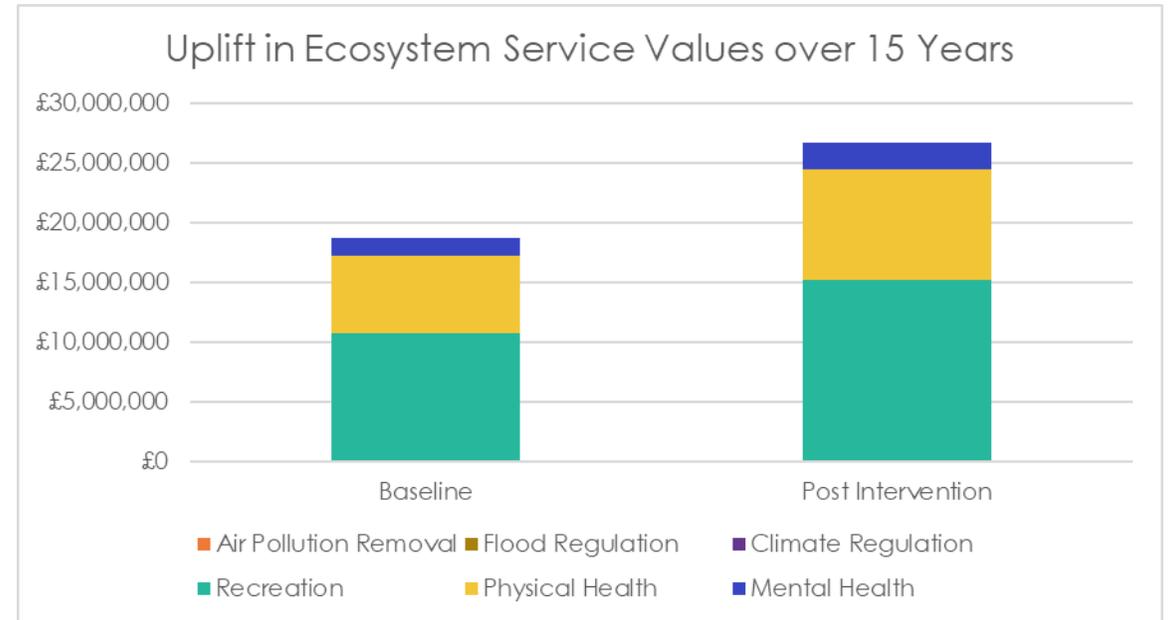
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Interventions

- Planting of 5 orchard trees
- 1,100m² of woodland area planted with woodland flowers & plants
- 3,000m² of amenity grass converted to flowering lawn & 300m² planted with bulbs
- 3 entrances improved with dry stone-built entry points, twinned with bug houses
- 1.25km of hedgerow flower planting

Results

- Increase in ecosystem service provision of **£7,906,700** over 15 years (**26% increase**)
- Monetised biodiversity units expected to increase by **12%** from **53** units in the baseline to **59** units in the post-intervention scenario
- Recreation, physical & mental health benefits expected to increase the largest in relative terms post intervention (**42%**)
- Limited quantified gain for air pollution removal, climate regulation and flood regulation
- Recreation and physical health make up over **99%** of the total benefit



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Qualitative Assessment

- Retaining the woodland habitats will help **mitigate against climate change** and **improve air quality** through capturing pollutants from the atmosphere.
- An orchard will be planted, **increasing biodiversity** and providing food for local residents.
- The 1,100m² of woodland enhancement and 1.25km planting of hedgerow with flowers will **increase ecological diversity**, providing habitat for a wide range of species.
- **Accessibility to nature** will be improved through improvements to existing entrances, lifting crown height of the woodland to 3m above path height and clearance of fallen debris across 0.75 Ha of the woodland.
- These will provide opportunities for the **community to connect with nature** and enjoy the associated **health benefits** of being outdoors.
- The creation of visually attractive flowering lawns as well as 5 bug hotels at each new entrance will **increase biodiversity** by providing a **haven for pollinators**.



Methodology



Methodology

- The methods for estimating social uplift are based on Defra's guidance on Enabling a Natural Capital Approach (ENCA)¹ and aligned with HM Treasury's Green Book².
 - Other methods are adapted from the Environment Agency's Natural Capital Register Accounts Tool³ (also updated in July 2023), Natural England Biodiversity Metric 4.0⁴ and the Outdoor Recreation Valuation tool (ORVal)⁵ developed by the University of Exeter.
 - For all methods, prices are inflated to 2025 prices where applicable using the HM Treasury GDP Deflator⁶ to ensure comparability of values.
 - All monetary flows exclude biodiversity to avoid double counting.
- The uplift in social value from the interventions in the slides to follow represents those being provided over a 15-year period to align with SGC management decisions.
 - Benefits in future years are “discounted” i.e., adjusted for society's preference for benefits now compared to the future, in line with HM Treasury's Green Book guidance.
 - These are referred to as “15-year present values”

¹ <https://www.gov.uk/guidance/enabling-a-natural-capital-approach-enca>

² <https://www.gov.uk/government/publications/the-green-book-appraisal-and-evaluation-in-central-government>

³ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1180209/Natural_Capital_Register_and_Account_Tool_-_User_Guide.pdf

⁴ <https://publications.naturalengland.org.uk/publication/6049804846366720>

⁵ <https://leep.exeter.ac.uk/orval/>

⁶ <https://www.gov.uk/government/collections/gdp-deflators-at-market-prices-and-money-gdp>



About Eunomia

Eunomia is an independent sustainability consultancy driven by a genuine passion to make a positive change to the clients we work with and the communities they operate in. Founded in 2001, we have been pioneers in the sector - early advocates for helping NGOs as well as leading public and private sector organisations in the UK and overseas to adapt their approach and adopt more sustainable processes.

Our consultants are experts in the field, deeply immersed in the subject with the technical knowledge and skill to offer clients innovative, clear and practical recommendations. We are committed to finding solutions to better protect the planet, while supporting the wider aims and needs of our clients.

Each client is treated as an individual, with consultants taking the time to understand their objectives and how best we can support them. This personal service ensures a strong relationship is forged, based on honest and regular communication. It also ensures if these objectives change, there is the flexibility to adapt.

As an established leading independent consultancy, clients can have complete confidence that consultants will offer evidence-led solutions based on robust, impartial thinking that offer both pragmatic and positive outcomes.