

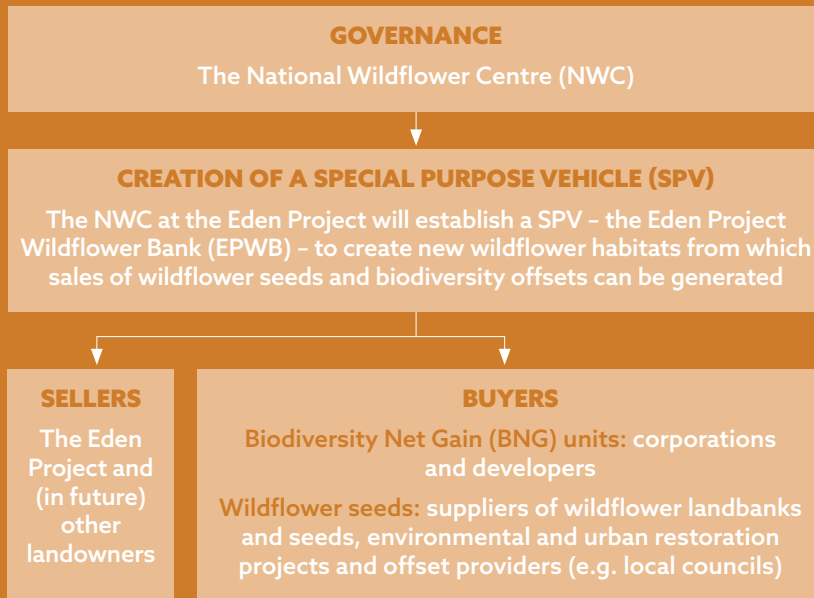
This is one of a suite of case studies of NEIRF funded projects, to highlight efforts to protect and enhance the natural environment, while generating revenue from ecosystem services.



Eden Project, Cornwall

THE EDEN PROJECT

HIGH LEVEL SUMMARY OF PROJECT



Habitats and geographical location

 Urban/peri-urban and semi-natural grassland

 England-wide



PROJECT OVERVIEW

Flower-rich habitats are key components of functioning ecosystems, offering important connectivity for wildlife through intensively farmed land and urban landscapes, as well as shelter and nectar for pollinators, including vulnerable and threatened bee populations.

However, Natural England estimates that around 97 per cent of wildflower meadows and other flower rich landscapes in England and Wales have been lost since the 1930s. The Eden Project's NWC aims to reverse the long-term loss of wildflower habitats in England by creating 100 hectares of wildflower habitat, per year, for the next 10 years.

The project will create a SPV, the EPWB, to deliver this and to generate revenue through two financial mechanisms: the sale of BNG units to corporations and developers who want to offset biodiversity loss or meet BNG requirements, and the sale of wildflower seeds harvested from those new wildflower habitats. The wildflower seeds will primarily be sold to environmental and urban restoration projects via wholesale markets and retail outlets (primarily the Eden Project shop in Cornwall and the web shop).

NEIRF funding was used to develop the proposition, cost plan, investment model, and to consult experts beyond the Eden Project. It also allowed the NWC to create a project methodology to underpin the business plan for EPWB and give clarity on:

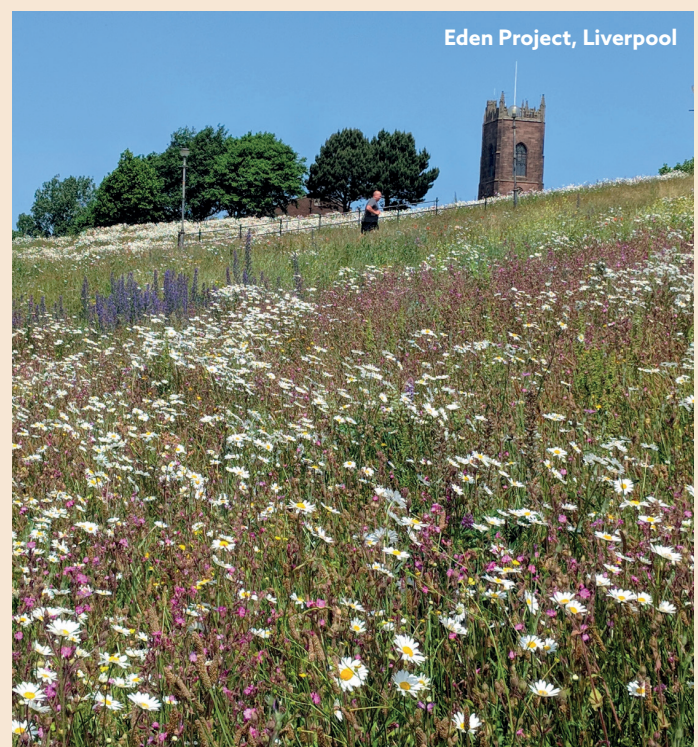
- The techniques for creating wildflower habitats, the costs involved in creating a habitat, and the cost per hectare for managing and maintaining a habitat.
- Biodiversity offset methods and pricing within the BNG market.
- Seed yield totals for habitats created.
- Funding/capital required to meet the expected demand.
- The cost of seed cleaning and of fulfilling seed orders.
- The operational costs of the project.

Immediate next steps include the creation of a new company structure for EPWB, securing capital investment, and building the landowner and buyer pipelines. The next steps for the project also include:

- Developing the business case for EPWB.
- Establishing three regional (Southwest, Northwest, and Southeast) partnerships with landowners, developers, and businesses to drive the creation of 100 hectares of wildflower habitat each year.





Establishing seed supply networks and a national wildflower living seed bank of the wild flora of Britain. The bank will be used to seed active project work; to produce future harvests of more seeds for storage and planting, in a cycle of habitat creation and maintenance.

- Creating a verification process for buyers of BNG units, in the form of criteria by which the project can assess corporations/developers for risk of unit purchases being used to support greenwashing. This is to protect brand and project integrity and is likely to include considerations such as creation of habitat, additionality and adherence to local authority mitigation hierarchies.

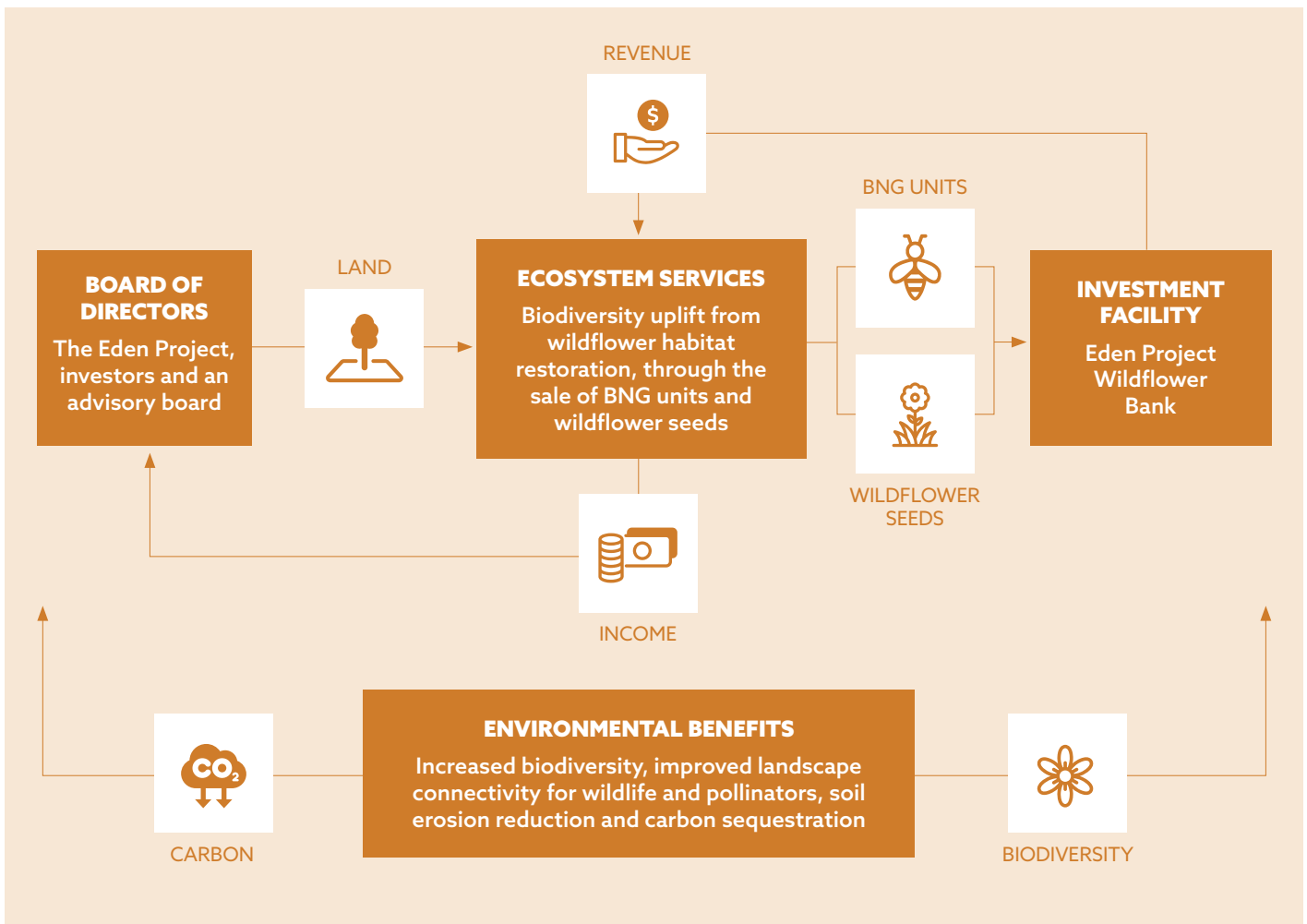


THE EDEN PROJECT

GOVERNMENT ENVIRONMENTAL GOALS

 <p>Clean and plentiful water</p>	<p>Stabilising topsoil prevents erosion and runoff which helps keep waterways clean.</p>
 <p>Thriving plants and wildlife</p>	<p>Increasing wildflowers by sowing seeds will improve the genetic diversity of wildflower populations, supporting species diversity. Habitats of native flower species will support local ecosystems by attracting insects vital for soil health and the pollination of wild, domestic, and commercial plants.</p>
 <p>Enhancing beauty, heritage and engagement with the natural environment</p>	<p>Creation of wildflower habitats will provide places for people to engage and reconnect with nature.</p>
 <p>Mitigating and adapting to climate change</p>	<p>Wildflower meadows can sequester three tonnes of carbon per hectare. Adding wildflower species to grassland significantly increases cumulative carbon storage in plants and soils.</p>

OPERATING MODEL



THE EDEN PROJECT

OPERATING MODEL CONTINUED

The Eden Project will manage the overall programme, while the Board of directors for EPWB will also include any investors into the SPV, and an advisory board of experts in academia, commerce, and conservation organisations.

The business model is reliant on building a pipeline of landowners willing to enter into 30-year agreements to provide land on which to create wildflower habitats. Landowners may be incentivised by receiving a proportion of biodiversity offset revenue, or seed sales income. The project has engaged with landowners by facilitating meetings, providing information around the proposed habitat enhancements, the BNG allocation processes and the role the SPV will play in the negotiations with local authorities around planning permission. So far, several landowners have expressed interest in taking part in the project.

METHODOLOGY, MONITORING, AND EVALUATION

The wildflower habitat creation model will be based on a tried and tested model used by the NWC for the past 20 years. The project identified ways that land can be prepared and managed for wildflower growth (including ploughing, topsoil inversion and turf stripping) and produced a cost/benefit analysis of each method to understand impact on yield versus biodiversity in order to achieve both of its goals.

Management of habitats will be informed by a dedicated annual management plan to ensure that weeds don't overcome wildflower meadows and that soil fertility doesn't reach unsustainable levels. A systematic monitoring scheme will be set up for the sites, and habitats will be assessed annually using the BNG Metric 3.1 to evaluate each habitat for BNG uplift that may have been achieved. Monitoring and evaluation data will be shared with landowners, stakeholders, and community interest groups/environmental organisations for educational purposes. They will inform best practice on establishing wildflower habitats at landscape scale.

INNOVATION

The approach is innovative in its dual model to generate income through two different opportunities: the growth of wildflower habitats for BNG and the sale of seeds. The diverse business model incorporates traditional farming approaches to crop production and the sale of yields that appeal to farmers, while also incentivising landowners and the Wildflower Bank to manage and maintain new habitats to the highest standards over a 30-year period to maximise seed yield and income. Aimed at urban and peri-urban environments, the approach gives investors the opportunity to engage in a local, flexible scheme where small parcels of land are utilised.



LEARNING POINTS

- **Keep it simple** – stacking multiple interventions within a single habitat creates greater complexity.
- **Ensure flexibility within the model** to be able to adapt as more knowledge is gained. Accept that activities may not always be linear and consider a range of financing options including equity investment.
- **Carefully organise staff time** as this can affect the pace of work. Engage with nature recovery and habitat creation communities and organisations to share learnings.
- **Ensure sufficient budget for legal processes** such as establishing templates linked to Section 106 agreements (obligations between local authorities and landowners as part of planning permissions), conservation covenants, and corporate articles to support the structure of EPWB.

WOULD YOU LIKE TO KNOW MORE?

If you would like to learn more about the Eden Project please get in touch with Dan James, Development Director at djames@edenproject.com. For questions regarding NEIRF, please contact NEIRF@environment-agency.gov.uk.

This case study was produced by Ecorys.