Wendling Beck, Norfolk

Aspirations for wider nature recovery

Biodiversity net gain (BNG) is a new market which will offer another way to fund nature recovery, alongside providing an alternative income stream to complement other business activities.

This case study explores how Wendling Beck Environment Project is combining different environmental schemes to make financial and ecological sense, and how the project is approaching risks over the 30-year BNG agreement period.



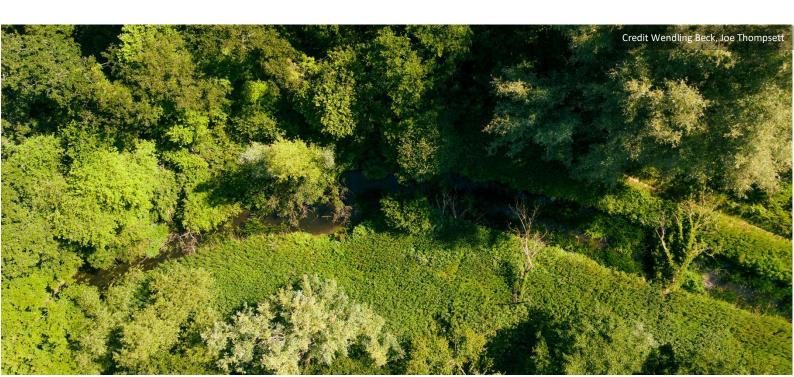
Wendling Beck Environment Project is a collaboration between four farmers, local authorities, environmental NGOs and the private sector. Located north of the market town of Dereham in Norfolk, it is a pathfinder for nature-based solutions to address climate change and mitigate biodiversity loss at a landscape-scale. With farm subsidies being phased out and the pressures of climate change on light-land farms, the landowners wanted to use nature to diversify their businesses and make them more resilient both financially and environmentally.

Wendling Beck was selected to be one of Natural England's statutory biodiversity credits pilots, in preparation for mandatory BNG. Monies from sale of statutory biodiversity credits will be invested in habitat delivery in England. Together with Defra, Natural England is investigating the potential projects in which the Secretary of State may choose to invest in future.

The aim is to take almost 800 Ha of grade 3 arable land and create a mosaic of species-rich meadows, lowland heath, wetlands, woodlands, and restored chalk streams. This will sit alongside 50 Ha of retained regenerative blackcurrant farming.

The big picture

In 2021 the Environment Act became law with the intention of improving air and water quality, halting the decline of species, and improving the natural environment for future generations. Delivering on the commitments of the Environment Act requires a huge variety of actions, including BNG.



Often, landowners may choose one or two funding avenues for nature recovery on their land. Wendling Beck is unusual in the number of different schemes it is bringing together, including BNG, nutrient mitigation, natural flood management, along with regenerative farming.

With this degree of complexity, it is vital to keep an eye on the goals and objectives. Glenn Anderson, project lead, is particularly proud of the "vision map" which he says helped keep partners aligned on the ultimate aim of the project, and how smaller discrete projects fed into the big picture.

For example, Wending Beck is one of Natural England's Nature Recovery Projects, created with the intention of kick-starting a nation-wide Nature Recovery Network. "With this bigger aim and an eye to where we sit within the national picture, BNG is an invaluable funding mechanism to deliver real change on a massive scale," explains Glenn Anderson. "It is exciting to be part of a world-leading movement. It is something we absolutely have to try."

A variety of finance models

"Part of the required response to mitigate and adapt to the twin pressures of climate and biodiversity crises involves re-evaluating the end-to-end natural capital associated with land-use," explains Glenn Anderson. "We're in a nutrient venerable catchment, which enables us to deliver interventions to mitigate nutrient pollution alongside BNG, so we're able to really leverage the financial benefits we're delivering for others."

Government guidance on combining environmental payments is kept updated on GOV.UK.

Glenn continues, "a large proportion of the world's economies are highly dependent on nature in some form, and therefore nature has a financial value. Without it our livelihoods, our health and wellbeing, our climate and ultimately our societies fall apart. Nature is the central part of our finance model, so it is great to see a growing movement recognising this."

Using the BNG metric to baseline the site and calculate projected habitat creation, the results suggest that the 800 Ha site could sell around 2,500-3,000 biodiversity units. Financial analysis of Wendling Beck's plans calculates that they will be financially better off over a period of 30 years as a result of their switch away from arable farming, whilst still contributing to food production through the blackcurrants and extensive livestock grazing. "This is of course an estimate," clarifies Glenn Anderson, "we don't know the exact demand and we've been conservative with our pricing."



Climate change

The price for biodiversity units will have to factor in a number of risks given the contract must commit to a 30-year delivery period. One of the biggest risks is climate change, something Glenn Anderson has already experienced in the three years since first thinking of BNG as an option.

"We want the highest quality of seed for our habitat creation, and we need great genetic stock from near the project if possible to maximise our chances of successful habitat delivery. We need something which is already resilient to our climate," explains Glenn Anderson. However, there isn't enough seed in the country to achieve the national level of ambition, so Wendling Beck is collaborating with the Eden Project to encourage the establishment of local flower seed hubs.

Even with the investment of high-quality seed, climate change can pose a challenge to the early establishment of habitats. "We tried to establish grassland in Autumn 2021 and in 2022 had the worst drought on record" Glenn Anderson adds. The team sowed hand collected seed costing tens of thousands of pounds and around half of it was lost to the lack of rain. "We had to build this risk into our pricing, and we're looking at other options like growing on plugs or green hay and establishing a slightly lower distinctiveness sward and enhancing it with plugs later." In theory a lot of the seeds can also stick around in the seedbank until there are better conditions, but that's not an assumption Glenn Anderson wants to test when there are legally binding commitments.

In 2023, the weather has been slightly kinder, and things are looking up, but Glenn Anderson isn't complacent. "You have to remember that this requires a completely different skillset than the one we've been honing as arable farmers. This is high-end conservation management, and becoming experts in adapting for climate change is a steep learning curve. It is great to have support from those who are experts in this field."



The value of past site maps

"Some of the best experts are those who have come before us and knew this land intimately," says Glenn Anderson, referring to the maps he has of the site from hundreds of years ago. "We can see so many examples where the land was previously heath, through emerging hedgerow species and old field names like 'Heathfield'. It gives us confidence to be restoring a habitat that we know has existed here before."

This confidence is invaluable, as heath is a tricky habitat to deliver from a baseline of arable. Wendling Beck is working the local Wildlife Trust and other experts to make sure all the necessary actions have been taken. It is currently a field of commercial rye, which will help reduce the nutrient build up from the years of intensive farming. The team are monitoring the soil chemistry on an ongoing basis to know when it will be ready to transition.

River restoration

One of the biggest changes on the land has been the restoration of the rivers. The aim was to slow the water and hold it on the land to prevent flooding and allow the reduction of nutrients continuing to course along towards the sea. "We're only a couple of years in and the change is already remarkable." Glenn Anderson and the team are not done yet. "It is still only seasonally wet, and we assume it was wet throughout the year in the past, so there is still more to do."





Involving the local community

Wendling Beck has been so prioritised on the large number of partners than the neighbouring community was initially somewhat overlooked, to the extent that when the first spades went into the ground, one of the local rumours was that there was going to be a theme park. This lesson was quickly learned and the neighbouring houses and those walking through Wendling Beck are now much more involved.

Glenn Anderson's final reflection notes that the masterplan includes an 'Environment Hub' in partnership with the County Council, with the aim for it to become a public gateway to the project and that schools, groups and the general public can learn about what is happening at Wendling Beck. "We're keen to share our experience as broadly as possible, and to educate people on the risks to wider society of climate change and biodiversity loss, because that's the way to make long-lasting change."

Natural England seeks to achieve thriving Nature for people and planet by building partnerships for Nature's recovery.

Biodiversity net gain is part of the government's Environment Act 2021. Natural England is working closely with and advising Defra on the design and development of BNG.

The Wendling Beck Environment Project has received funding through the Natural Environment Investment Readiness Fund which supports projects to attract private sector investment into nature restoration. Find out more: https://sciencesearch.defra.gov.uk/ProjectDetails?ProjectId=21027