Natural capital River Beane

Each year, we work on enhancement schemes within our catchments to improve the environment.

In the catchment area around the River Beane, we have undertaken river improvement works, removed invasive species, evaluated our ability to reduce abstraction and worked with farmers to change farming practices by using winter cover crops - that is crops planted for other benefits rather than harvesting.

To quantify the impact of these schemes on the health of the environment, we use a natural capital approach and develop a natural capital account. We developed our River Beane natural capital account through a desk study using the Environment Agency's Natural Capital Register Accounting Tool ('NCRAT'). We supplemented this with Farmscoper and Biodiversity Net Gain Metric 3.1, allowing us to quantify and value 11 different ecosystem services.

To assess the environmental value added, we developed a baseline for the Beane catchment and then evaluated the benefits of our various environmental enhancement schemes, and their value to people and society through measures such as their quantity, condition, and location of natural assets. Once the environmental impacts and improvements have been quantified, it is possible to assign a financial value. The natural capital account demonstrated we made improvements to the environment (or natural capital), which included, for example, biodiversity, water quality and carbon reduction.

The table to the right highlights the environmental benefits of each of our projects in the River Beane catchment

Woodhall Phase 1



Carbon seq. 6.39 tCO₂e/yr



- reduction
 - -18.85 kg N/vr -0.39 kg P/yr -251 kg SS/yr



Biodiversity

3.09 (Habitat units) 2.33 (River units)



Water qual bundled benefits

0.63km improved

Walkern Road



Water qual bundled benefits

2.58km improved

The Rookery



Water qual bundled benefits

1.49km improved

Cover cropping



Carbon seq. 67 tCO₂e/yr



Water qual. emissions reduction

-1.969ka N/vr -7 kg P/yr



Biodiversity 267 (Habitat units)

Woodhall Phase 2



Carbon seq. 6.1 tCO₂e/yr



Water qual. emissions reduction

-17.42 kg N/yr -0.37 kg P/yr

Biodiversity

-238 kg SS/yr



2.83 (Habitat units) 2.97 (River units)

Water qual bundled

benefits 1.42km improved

Frogmore Park



Water qual bundled benefits

0.71km improved



Biodiversity 0.84 [Habitat units/ha]

Sustainability reduction



Biodiversity

2.15 (River units/km)

Total natural capital contribution to catchment baseline



UNSDGs

Our alignment with the UN Sustainable Development Goals





