

Lea Catchment Project:

Natural Capital (NC) evaluation of Affinity Water environmental schemes in a targeted sub-catchment of the Lea

Objectives

- Evaluate, using a natural capital (NC) approach, the various environmental projects and investments made by Affinity Water in the River Beane catchment in the Upper Lea.
- Generate knowledge and better understand the effect of our actions in terms of how/if environmental enhancements were achieved, the arising benefits and disbenefits (and monetary value).
- Enhance our understanding of NC to support development of approach for future decision-making including the inter-dependencies between measures.
- Inform how we scope, design and deliver schemes in a more integrated way.

Challenge

Affinity Water have invested a significant amount in environmental schemes with an increased regulatory and customer expectation to deliver more over the next 25 years.

The environmental benefits of environmental schemes nature-based solutions (NbS) are not fully understood which can lead to investments not delivering the desired benefit.

There is a need to ensure that future investments deliver the greatest benefit for the environment and customers.



Solution

- Undertake a NC evaluation of investments between 2015 and 2022 across a range of ecosystem services (e.g. water supply, biodiversity, climate change regulation, water quality, recreation, education, soil health and well-being) with Atkins utilising their Natural Capital studio.
- Delivered projects included in the evaluation included: abstraction reduction, river restoration, nature-based solutions and invasive species management.

Benefits and Outcomes

- Enabled us to link together discrete projects and schemes and use the NC methodology to showcase quantitative values for selected ecosystem services that creates a powerful and illustrative body of evidence for Affinity Water investments in environmental schemes.
- Monetisation of the benefits enabled us to assess which projects delivered greatest cost/benefit and insight how to deliver greater cost and environmental benefits for future environmental schemes.
- Has supported the development of our Water Industry National Environment Programme (WINEP) submission for our 2025-2030 (PR24) business plan with positive feedback from regulators.
- Will help ensure that future investments in environmental measures deliver the greatest benefit for our customers, wider society and the environment with a mechanism to demonstrate these benefits.
- Develop future NbS options that consider recreation, education and well-being needs of customers and communities.

