

Ecosystem Services of the Upper Mersey Estuary

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1. What are Ecosystem Services?

Ecosystem Services are the benefits we get from the environment. They are typically put into 4 categories; provisioning services (things we harvest such as food), regulating services (that make human life possible such as flood mitigation), cultural services (things that have importance to us, such as national parks), and supporting services (which support all life, such as soil creation)

Why are Ecosystem Services Important?

As human impacts on natural environments become larger, it is important to find a way to balance the demands of people with nature. By modelling Ecosystem Services supply and demand we can consider this in planning. We can also predict what mitigation measures will be needed for a development before it is built. This is also a strategy being considered for policy in the UK to mitigate environmental damage.

How do we map Ecosystem Services?

This project used EcoservR to map Ecosystem Services. This maps the habitat types in the study area and scores them for Ecosystem Service supply and demand based on literature.

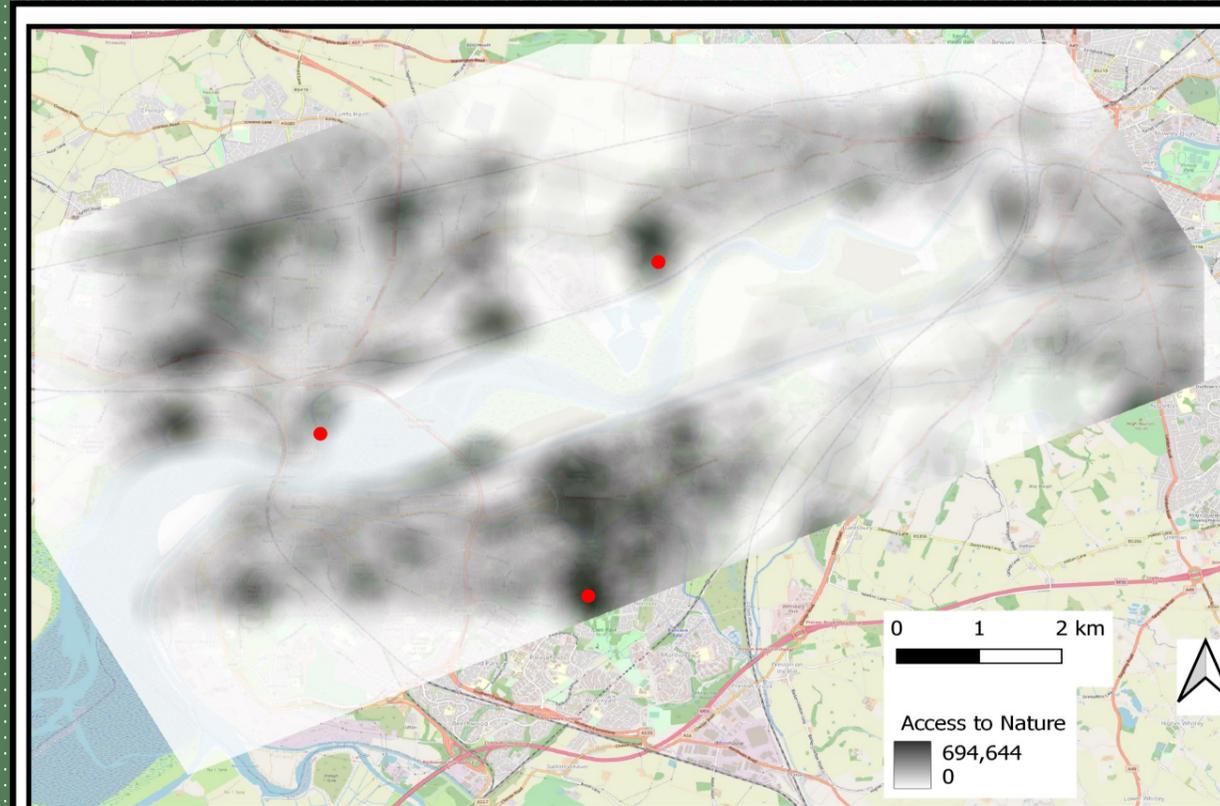
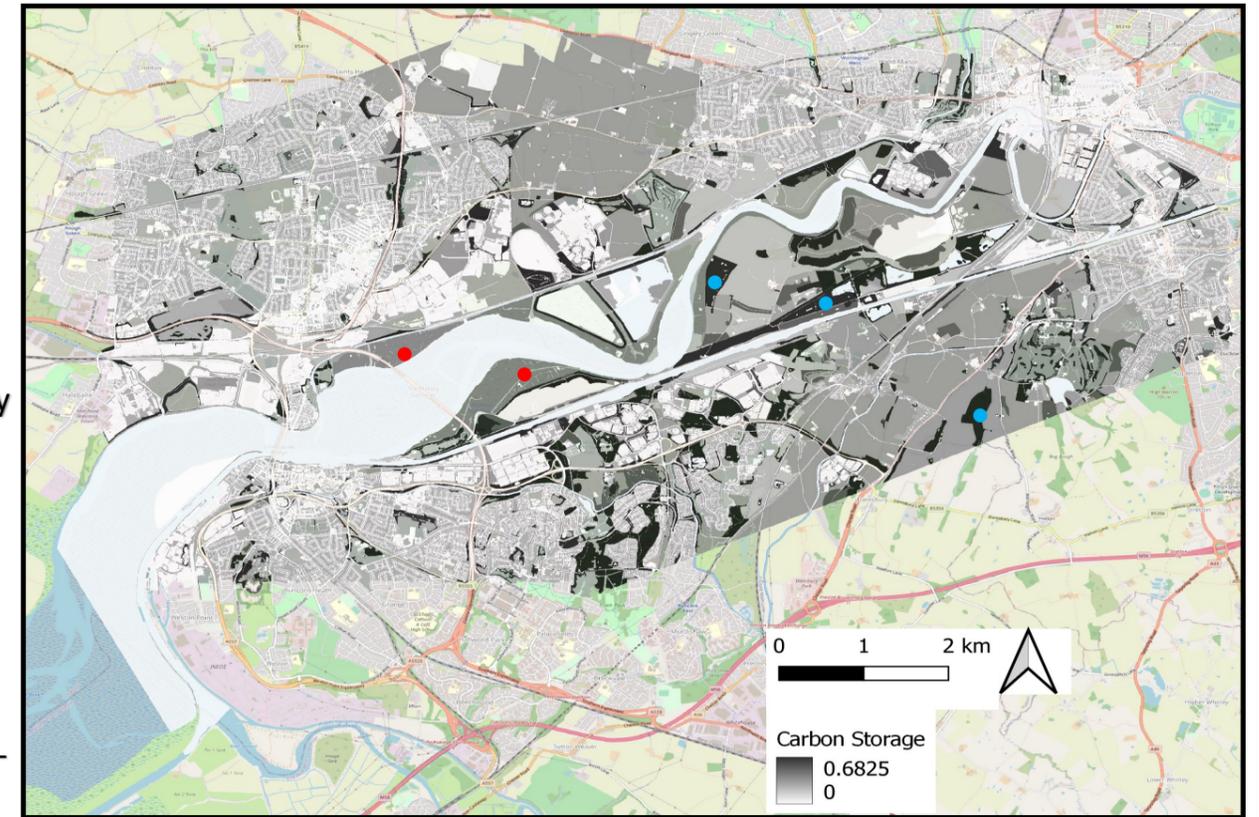
4. What do we do next?

The next stage in the project will be to confirm that these habitats are providing the ecosystem services modelled as well as explore how condition of the habitat affects ecosystem service provision.

2. Carbon Storage Capacity

Storing carbon from the atmosphere is a key part of tackling climate change. Habitats found in the study are such as woodlands and saltmarshes are significant carbon storage areas. This is especially true if they are in good condition.

The map shows the carbon storage capacity of different habitats in the study area, with darker areas indicating a higher storage capacity. The red dots show 2 key saltmarsh sites along the river which have a high capacity for storing carbon and could be improved with restoration. The blue dots show areas of woodland with very high carbon storage capacity.



3. Accessible Nature Capacity

Getting into nature has several benefits for people. It helps us improve our mental and physical health, provides a recreational space, holds cultural value, and can promote tourism to the area among other benefits. We get the most out of natural environments when they're easily accessible and well looked after.

The map shows how accessible nature is, with darker areas being more easily accessed. The red dots on the map indicate 3 public parks in the area, all having a high capacity for accessing nature.