# Wetlands



Urban drainage, sewage overflow and farm runoff, all contribute to excess nutrients and pollution in rivers. This degrades rivers and makes them less habitable for the species that rely on them, including ourselves. Wetlands also help flood alleviation, are a carbon sink and of course provide a fantastic habitat for bio-diversity with the public amenity benefits of that natural environment.

"One of nature's richest habitats. Wetlands are packed with an abundance of species"



### River restoration

There are many successful river restoration projects in the UK, where a river has been put back into a more natural form, removing modifications that were made over the last few centuries.

River restoration creates fantastic natural wetland habitats, helps flood prevention, creates public amenity value, whilst also filtering nutrients from the river and capturing carbon and other pollutants.

### **Urban spill pools & storm outlets**

Urban spill pools are areas of land where urban run off will go through wiggly channels or temporary ponds to allow the pollution to be filtered with riparian plants such as wildflowers and reeds. This can be as simple as a road gutter having a French drain under the pavement and releasing the other side into a ditch. This can also reduce the storm run off that enters the waste water system and overwhelms sewage treatment works.

## **Leaky log dams**

These are used higher up a river catchment. They allow brooks and tributary streams to function normally in normal conditions, but will slow down peak flows. Preventing floods downstream.

They also remove silt and nutrients from the water, protecting the river downstream and retaining nutrients where they can be retrieved and redistributed to farmland higher up the catchment.

### **Field margins**

As farming grants transition to a more environmental land stewardship focus, paying farmers to dig some ditches and plant some reeds, is a very cost-effective solution, for much publicised problems like the river Wye catchment.

Scrapes and ponds along a field margin next to a river can capture escaping nutrients, where they can then be recovered and redistributed to the field.

#### Peat and moorland

Another victim of changed land use over the last few centuries; this incredibly valuable habitat provides a vital life supporting function for life on this planet as much as rain forests do, but don't get nearly the same level of attention.

Really simple things can be done to restore wetlands, but also in sympathy with the needs of the lands contemporary use.

#### **Beavers**

Pretty much all of the human intervention we do to restore wetlands is just us pretending to be beavers. We mimic their activity. Wetland conservation projects can be hard work and expensive. Beavers would be like free full time volunteers and we don't even have to feed them.

It is important that Beavers are released in suitable locations with a suitable management plan in place.