

Restoration Handbooks published to give best practice advice on creating new estuarine and coastal habitats

Three new environmental handbooks that set out guidance for the first time of how to carry out best practice estuarine and coastal habitat creation projects across the UK and Ireland have been published.

The handbooks provide practical guidance on restoring and creating estuarine and coastal habitats, bringing together advice on planning and implementing such schemes with case studies and lessons from previous examples.

They will be a tool to support local authorities, community partnerships and environmental organisations on restoring blue carbon habitats – habitats that can absorb carbon dioxide, help achieve net zero and tackle climate change.

The three detailed handbooks have been written by academics, industry specialists and environmental organisations that are experts in the field:

- Saltmarsh, led by the Environment Agency
- Seagrass, led by Zoological Society of London, University of Portsmouth and the Environment Agency
- Restoration of Estuarine and Coastal Habitats with Dredged Sediment, led by Centre for Environment, Fisheries and Aquaculture Science, Environment Agency and marine consultancy and survey company ABPMer

Since the Industrial Revolution there has been significant loss of nature-rich, carbon-storing estuarine and coastal habitats around the UK and globally, which the handbooks aim to counter by encouraging restoration projects and laying down best practice guidelines.

The handbooks look at a range of existing projects as case studies, such as:

- The restored saltmarshes in Cwm Ivy on The Gower Peninsula and Steart in Somerset restored saltmarshes
- The Seagrass Ocean Rescue reseeded seagrass beds in Dale, Pembrokeshire
- The Solent Beneficial Use of Dredged Sediment scheme

The creation of these habitats will provide flood defence, fisheries, water quality, biodiversity, social and wellbeing benefits, as well as mitigating against climate change.

The coastal restoration handbooks are hosted on the website of the Catchment Based Approach (CaBA), a partnership of local authorities, water companies, environmental organisations and businesses working together to maximise the natural value of the environment.

Emma Howard Boyd, chair of the Environment Agency, said:

Ecosystems cannot adapt as fast as the climate is changing. There is a biodiversity crisis as well as a climate crisis.

It is essential we tackle the climate emergency head-on and to do that we need to move towards a sustainable economy based on valuing nature, and protecting and restoring the natural environment at its heart.

These handbooks set a standard and streamline projects, helping to reduce costs to projects and ensure the best possible outcomes.

Alison Debney, Marine and Freshwater Conservation Programme Manager, Zoological Society of London, said:

By restoring our carbon-rich estuarine and coastal habitats, we both recover biodiversity and build our resilience to climate change creating a win-win situation for nature and people.

Natural habitats provide us with many benefits including protection from coastal flooding, improved water quality, food provision in addition to their incredible carbon-storing potential and biodiversity conservation.

It is the intention that these handbooks provide us with the 'how-to' so that we can collectively contribute to recovering these vital yet neglected habitats and contribute to addressing the global challenge of climate change.

These three handbooks partner with the existing handbook on European native oyster habitat restoration, which was published in November 2020.

All four restoration handbooks will be living documents and will be updated when changes in legislation or updated science.