

Location: Solent

Aim: To reconnect the Solent into a functioning seascape by improving the condition, extent, and connectivity of key marine and coastal habitats, using

protection and restoration initiatives. **Project Manager:** Louise MacCallum

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The Solent strait, covering an area of 522km² between mainland England and the Isle of Wight, is a major estuary system. Home to a network of harbours, spits, numerous islands and vast sandbanks, these dynamic marine and estuarine habitats are bursting with life. Saltmarsh, seagrass, mudflats and oyster reefs provide for an abundance of species. Fish and shellfish such as king scallops, cockles, cuttlefish and bass all depend on these habitats for shelter and food. Endangered species such as the European Eel and Thresher Shark as well as seahorses find sanctuary in the Solent. Larger marine predators are drawn to this rich source of food with the Solent supporting around sixty harbour seals, increasing numbers of grey seals, and even occasional bottle-nose and common dolphins. The Solent is of international significance for birds, attracting more than 12,000 breeding pairs each year including many species of terns and gulls. The estuaries of the Solent provide wintering grounds for over 125,000 ducks, geese and wading birds such as redshanks and oyster catchers. 10 per cent of the world's Dark-Bellied Brent Geese population call the Solent home. The Solent not only supports a diversity of marine life, but is rich in maritime heritage and has provided for its coastal communities for generations.





Project overview

The Solent is one of the most heavily used waterways in the UK. With a population of over 1.5 million, 79,000 shipping movements per year and a quarter of all the coastal marina berths in England, it is under increasing pressure from coastal squeeze, poor water quality, unsustainable fishing, recreational disturbance, and sea level rise. Sadly, this has resulted in the Solent's internationally important marine and coastal habitats becoming diminished, degraded, and fragmented. Over 50 per cent of the area's saltmarsh has been lost, equivalent to an estimated carbon fixing potential of around 5,000 tonnes per year. Oyster populations have declined by 95 per cent causing the collapse of the fishery, and all 650 hectares of seagrass beds are in poor condition.

These habitats collectively provide numerous ecosystem and social benefits. They act as an important carbon store, helping to reduce the impacts of climate change, provide vital nursery grounds for commercially important fish, protect coastal homes from erosion and sea level rise, improve water quality, and provide areas for local people and tourists to explore their natural environment, helping to improve social wellbeing. In 2020, the Environment Agency and University of

Portsmouth assessed the value of water quality and climate regulation benefits the Solent's coastal habitats provide. The study concluded that the Solent's coastal habitats provide environmental benefits worth an estimated £1.1 billion every year. This highlights the true value of these critical habitats and the numerous ecosystem services that they provide.

Restoration efforts to date have been small-scale and focused on single species. As we enter the UN Decade of Ecosystem Restoration, Blue Marine Foundation and partners are bringing together existing restoration efforts and will be co-delivering an ambitious programme of ecosystem restoration to catalyse large seascape scale recovery across the Solent.

Vision

The Solent Seascape Project will be the first of its kind in the UK to initiate seascape scale recovery. Our long-term vision is to protect and restore at least 30 per cent of the Solent's seascape, tipping the balance from a degraded state to a naturally expanding, connected and productive ecosystem. By restoring and connecting the Solent's seascape, we will provide nature-based solutions to many of the issues currently affecting it and the people who depend on it, as well as helping to fight the impacts of climate change.



Project Activities

Over the next five years, Blue Marine and Partners will:

- 1. Work with local stakeholders and communities to develop and co-create a long-term seascape recovery plan, that supports better management of existing Solent marine and coastal habitats.
- 2. Actively restore 8ha of saltmarsh, 7ha of seagrass, 4ha of oysters, and 10 breeding seabird nesting sites to increase habitat extent and catalyse recovery across the wider seascape, improving ecological connectivity.
- 3. Assess ecosystem service benefits (carbon, biodiversity, nitrates), creating an evidence base of the wider benefits of seascape restoration.
- Work with government and regulators to develop key interventions and financial mechanisms to upscale the potential for seascape restoration in the longer term.
- 5. Empower local communities and build capacity to ignite and improve understanding of seascape processes, catalyse behavioural change, and increase involvement in seascape recovery.























