

# How can we protect the coast?



## The South-West

The Celtic Sea and English Channel surround the South-West of England. As the South-West is a peninsula, there are lots of coastal settlements in this part of England.

## West Bay

West Bay is a small harbour settlement and resort on the English Channel Coast in the rural county of Dorset. It was originally known as Bridport Harbour due to the fact that it is at the mouth of the River Brit and near the town of Bridport. West Bay is part of the Jurassic Coast, a World Heritage Site. As a result, people are striving to protect and preserve the coastline there.

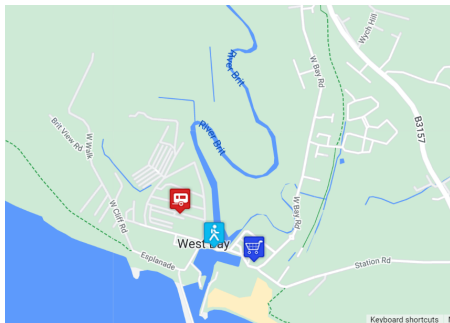
## Land Use and Industry

West Bay is supported by a local fishing economy and tourism. The heart of West Bay has a range of building types including shops, pubs, churches, cafes, flats and houses. The harbour has commercial fishing, boat repair businesses and is largely used for tourism. There is a local population that lives in West Bay all year round, but in summer months the area is much busier due to all the tourists. Away from the harbour, land use is largely for housing. A large area of West Bay is used for static caravans.

## Human and Physical Features

Key physical features of West Bay are the cliffs either side of the Bay, the River Brit and the beaches either side of the river.

Key human features include the static caravan park, the marina and local businesses for tourism. West Bay has two piers; West Pier is a newer pier and was built to provide protection from the coast and East Pier has been renovated. There are a wide range of historically significant buildings in West Bay, including the Old Salt House, St. John's Church, the Methodist Chapel and The Moorings.



West Bay - Aerial View



The Moorings late C19 - early C20th



Methodist Chapel 1849



The Bridport Arms C17-C18th



St John's Church 1936



Pier Terrace 1887



The George 1820

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Coastal erosion is the breaking down and carrying away of materials by the sea. The coast can be eroded by wind and the waves. Over time, this changes areas by the coast. Houses and land can be destroyed when cliffs fall into the sea so it is important to protect the coastline.

Sand dunes are formed naturally and block the wind to prevent erosion. The roots from vegetation stretch down into the sand dunes to make them sturdier; they also capture rain drops and windblown sand to stop it travelling further. The sand dunes stop the wind from travelling further inland, which protects the land and buildings there.



Sometimes, a sand fence is built by humans to prevent erosion. The spaces between the slats of the fence cause the wind to drop the sand particles they are carrying, which makes it a fast way to create sand dunes.



Seawalls are usually made from concrete, steel or boulders. They are commonly used to protect buildings that are in danger from erosion. They run parallel to the beach but they are expensive to maintain. Sandbags are often used instead because they are cheaper and easier to maintain.



## Why does the coast need protecting in West Bay?

West Bay is a victim of coastal erosion. The coastline faces southwest towards the Atlantic Ocean, which results in large and destructive swell waves. The harbour piers reduce the size of West Beach and this means that the sea causes damage more easily. Bad weather and rock-slides have left the cliffs unstable, and cliff falls have to be prevented and managed.

## How is the coast being protected in West Bay?

West Bay has sea walls to protect the coastline and buildings. There are also rock piles to prevent the wind travelling inland. Humans also changed the shape of one cliff face to make it slope more. East Beach was raised by adding more shingles.

## Vocabulary

**Settlements** - Settlements are places where people lived, such as cities, towns and villages.

**Land use** - This refers to how the land is used, such as for commerce (businesses), farming or recreation (fun activities like sport).

**Vegetation**—Vegetation refers to the plants that grow somewhere.

**Flooding** - This is when water covers land that is usually dry.

**Coastal management** - This is the methods humans use to look after the coast.

**Prevention** - The act of stopping something.

**Tourism** - When people travel from where they live to another place for fun or to relax.

**Scale** - A map might have a scale to show the size of a place and the distance between places. For example, 1cm on a map might represent 1000m in real life. Lots of maps are drawn to scale and the scales vary from one map to another.

**Change** - When something is no longer the same as before.