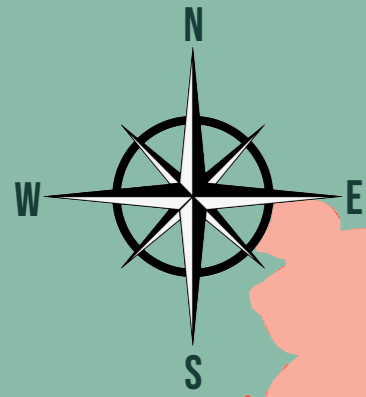


THE COAST



Map of the United Kingdom



Chichester Harbour is in the **South of England** and is part of the **coast** of the **United Kingdom**

- The harbour has abundant wildlife, with many habitats like seawater, woodland, streams
- A Harbour with beautiful views, with features such as mudflats, sea channels and shorelines.
- Chichester Harbour is an **Area of Outstanding Natural Beauty**; it is a protected landscape.
- The landscape is shaped by the sea: tides and currents, the weather, and the seasons.
- It is a rural settlement. The Harbour is used for farming, watersports and tourism.
- The harbour has 53 miles of coastline, with 4 sea channels
- It covers 29 square miles, which is equivalent to 13,000 football fields!



Can you find the location of our Education Centre which is in Dell Quay?
Find the entrance to Chichester Harbour which is nearby to East Head.

LAND USE IN THE HARBOUR

Chichester Harbour is a rural settlement which means there is a lot of countryside and fewer people than in urban areas, such as towns. People live in the pretty hamlets and villages or in large houses on the water's edge.

Much of the countryside is farmland, where farmers raise beef cattle or grow crops, like wheat and barley.



Some of the countryside and much of shoreline is important for wildlife. There are many different habitats.

(link to Living Things and Habitats for more information)

Although this is a rural place, it is near to some large towns: Havant, Bognor Regis and the city of Chichester. It is a short drive for thousands of people to reach and enjoy this beautiful and peaceful place. Some visitors come from further away, for example London.

One of the most popular destinations is the sandy beach at West Wittering. Chichester Harbour can be a very busy place with over 1.5 million visitors every year.

Can you think of the good or bad consequences of a natural landscape having so many Harbour users?

HARBOUR USERS

Watersports:

The beautiful views and safe Harbour waters mean all types of watersports are very popular. There are a wide range of vessels: motorboats, yachts (larger sail boats; with an engine and a cabin for sleeping in), dinghies (smaller sailing boats), wind surfers, kayaks and paddle boards.



Over 12,000 boats use the Harbour every year. This brings a lot of money into the local economy because people need to pay for somewhere to keep their boats and to repair them. Boats are kept on a mooring (an anchored float on the water) or in a marina, which is a boat 'car park'. There are shops for boat maintenance and equipment. People must pay Harbour dues, a type of tax, if they want to get on the water. The Harbour dues pay for the navigation markers and the Harbour Patrol – who look after people's safety on the water

Walkers, wildlife watchers and tourism:

People enjoy walking in the Harbour area, for exercise, to see the beautiful seascapes and to watch wildlife. Birdwatching is very popular because Chichester Harbour has so many seabirds such as waders, ducks, and geese. Visitors can also enjoy the pubs, cafés, and restaurants in the Harbour villages. Some visitors are 'day trippers' but others stay for longer in holiday homes or on their boats. Like watersports, this kind of tourism supports Harbour businesses. **Why do rural places need shops and businesses?**



TIDES TIDES TIDES

What are the tides?

The tide is the regular rise and fall of the sea. This happens twice a day and is caused by the gravitational pull of the moon and sun against the earth. There are two high tides and two low tides each day.



Why is it important to know about tides?

Many industries need a knowledge of the tides, including shipping, fishing and coastal engineering. Tides can also be dangerous. It is important to know if the tide is coming in or going out. When the tide comes in (high tide) the whole beach can be covered by water. Lifeboats are often needed to rescue people who do not realise that a high tide is coming that could trap them.

EROSION EROSION EROSION EROSION EROSION EROSION EROSION EROSION EROSION

Erosion is the wearing away of the land by the sea. **Coastal erosion** occurs when the sea wears away the land. Erosion is usually a very slow process within the harbour, as the shoreline is protected from the full force of the sea. Boats can cause erosion by the waves they make on the water. We call these waves a 'wash'.

If a large boat travels through the water quickly, its wash can produce quite large waves that crash against the shoreline.

There is a speed limit of 8 knots in Chichester Harbour to reduce erosion from the wash of boats. Humans and animals can also cause erosion. Some footpaths around the harbour are used so often that they eventually crumble into the sea. Rabbits make large holes very quickly that can cause sections of shoreline to collapse.

The Harbour is managed by Chichester Harbour Conservancy. Their aim is to look after and improve its land, sea, and wildlife. They work with stakeholders: residents, Harbour businesses, sailors, farmers and government authorities, to look after the Harbour.

Why is it important that everyone respects this beautiful natural environment?



SEA DEFENCES SEA DEFENCES SEA DEFENCES SEA DEFENCES SEA DEFENCES SEA DEFENCES SEA DEFENCES

We use sea defences to protect the land from being flooded or eroded by the sea. Over the years the owners of the land around the Harbour shoreline have used many different structures to protect their land from erosion and flooding. Most of these can be described as 'hard' sea defences. Not all the coast is defended, there are 15 miles of natural shoreline

Sea defences like 'rip rap' (rock armour), which is made from large pieces of stone, are used in the Harbour. Where it is necessary to put in sea defences it is probably the best one to use because it absorbs the energy from waves.

Rip-Rap sea defence in Chichester Harbour



This is a concrete wall, an example of a hard sea defence



Chichester Harbour is prized for its natural landscape, so it is not always best to use 'hard' sea defences. If sea levels are rising and if the high tides get even higher, habitats such as mudflats, saltmarsh and shoreline beaches will disappear. This is known as 'Coastal Squeeze'. This means that the habitats are squeezed between a fixed boundary of sea defences and the rising sea level.

Saltmarsh is a very important habitat as well as a natural sea defence. One way of coping with rising sea levels is to create new saltmarsh shoreline. The sea is allowed to flood areas of land at high tide and the land eventually becomes saltmarsh. This is called 'Managed Realignment'. It is a good example of a 'soft' sea defence and very suitable for natural landscape.

