Tourism Business Guide to Understanding Coastal Change

Raising awareness and providing ideas for Poole Harbour and the surrounding area
This booklet has been produced for businesses in the tourism industry in Poole and the surrounding area to help raise awareness of coastal change and how it might affect them.

Different tourist sites are illustrated that highlight aspects of coastal change as well as providing some useful facts.

It is helpful to have a greater understanding of the local environment and the role natural processes can play in benefitting or providing challenges within the tourism industry.

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At the end of the last ice age about 18,000 years ago, a river valley flooded due to rising sea levels as the ice melted and oceans warmed which created the diverse landscape we know today as Poole Harbour.

There are four rivers which still feed into Poole Harbour; Frome, Piddle, Sherford and Corfe. The harbour and its bays, inlets and islands have continued to be formed by erosion, accretion and reclamation over the last 6,000 years. The harbour has been cut into easily eroded sands, clays and gravels which form its cliffs and provide its beaches.

The harbour itself is approximately 36km² in area and is fairly shallow with an average depth of only 48cm. The main shipping channel of the harbour was dredged and widened to allow larger ships to reach the port; it is currently 7.5m deep.

Poole Harbour is a highly designated area. It has:
- A RAMSAR site for its wetlands
- Multiple Sites of Special Scientific Interest (SSSI) for its range of estuarine habitats
- A Special Protection Area (SPA) for its internationally important wildfowl and waders
- The heathlands surrounding the coastline are protected as Special Areas of Conservation (SAC) and Special Protection Area (SPA)

The surrounding sea area from Studland to Portland is part of a SAC and is a Marine Protected Area due to its reefs with rich biodiversity and geological variation. The sand dunes and beach at Studland are part of a National Nature Reserve (NNR) and attract over 1 million visitors per year. The coastline from Swanage and Studland Bay are also part of the Jurassic Coast World Heritage Site.

Wareham is home to many historical buildings and structures. The tidal Wareham channel has been created by the River Frome and Piddle, which flow either side of Wareham, joining and flowing into Poole Harbour.
1. Sandbanks

A world famous site, known for being one of the most expensive neighbourhoods in the world (also known as ‘Millionaires Row’) with beautiful views across Poole Bay and over to Old Harry Rocks.

**Highlights**
- Golden sandy beach with shallow water - perfect place for swimming
- A mini road train runs along the seafront
- Ideal for watersports e.g. kayaking, windsurfing or paddle boarding
- Beach huts for hire

**Coastal Change**
Sandbanks was originally an area dominated by wild heathland and sand dunes until the 19th Century when residential development, together with beach erosion, almost completely diminished them.

In 2006, sand dredged from the main Poole Harbour channel was used to recharge the beach to help tourism and protect the residential properties. The beach will need to be recharged in the future to preserve it.

By 2030, this low-lying area could be cut off at certain times from the mainland because of erosion and sea level rise. Water taxis could become the next commuter transport for the residents (Poole Bay, Poole Harbour and Wareham FCERM Strategy, 2013).

Hook Sands, which is a sand bar at the mouth of the harbour, helps to minimize the wave energy that reaches Sandbanks and also provides sediment to the beaches at Studland.

2. Harbourside Park

Harbourside Park consists of Baiter Park and Whitecliff Park. They are versatile places to visit and have excellent views of Brownsea Island.

**Highlights**
- A cycle path alongside the length of the Harbourside Park – it’s 7.5 miles long if starting at Poole Quay and finishing at Upton Country Park
- A green gym
- A children’s play area
- BMX tracks
- An easy path to walk alongside the harbour
- A slipway to launch watersport equipment from

**Coastal Change**
Rock armour stretches along the park and is important protection for the area from stormy seas as the park is only a few metres above sea level.

**History**
Harbourside Park is a reclaimed landfill site which has been transformed into one of the largest and most intensively used areas of recreational land in Poole.

**Wildlife**
Whitecliff Wood is known to support a colony of the rare and endangered stag beetle, *Lucanus cervus*. They use the decaying wood to lay eggs.
Poole Park

Poole Park is a designated conservation area because of its architectural structures. It is a popular well-managed green space.

**Highlights**

- The park provides shelter for gulls, waders and ducks e.g. Ruffs or Great Crested Grebes
- An indoor ice-skating rink & play centre
- A mini road train operates during the summer from Poole Park to Poole town centre
- A 10 mile green gym trail

**Facts**

- **Coastal Change**
  Reed beds have been planted in the lake to help with water quality problems from the accumulation of heavy metals discharged from industrial activities in the 20th Century.

  Tassel Weed is an aquatic plant which can be problematic as it gets tangled in boat rudders. It is managed by the Borough of Poole which uses a blue dye to reduce the amount of available light in the water that they can use to grow, therefore reducing the amount of Tassel Weed in the area.

- **Wildlife**
  A rare lichen, *Cyphelium notarisii* can be found on a bench by the freshwater pond - the bench is specially maintained to ensure its survival. The lichen is sometimes referred to as Tramp’s Lichen as it is often found on park benches.

- **History**
  Poole Park was opened in 1890 and had a resident zoo until 1994. In its early years, the zoo housed a Himalayan Black Bear.

  The peacocks from the zoo were moved to Brownsea Island because their “strident calls” disturbed the local residents.

Upton Country Park

Poole’s only Country Park has formal and informal gardens, woodlands and parklands.

**Highlights**

- A nature trail and play trail
- A walled garden and formal garden
- Home to a diverse range of birds
- Sika deer can be spotted from the park on Pergins Island

**Facts**

- **Coastal Change**
  As sea level rises and floods the land here, there is potential to create 19 hectares of intertidal habitat, with landowners’ permission, to replace wildlife habitats lost in the area.

- **Wildlife**
  The Pipistrelle bat can be seen in the park and it’s thought that they roost in Upton House. They weigh less than a £1 coin but can eat as many as 3,000 insects in one night.

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- **History**
  Upton Estate was gifted to the Borough of Poole in 1957. It was opened to the public in 1976.

  The land was used as an airship sub-station during WWII.
Hamworthy Park provides spectacular panoramic views of Poole Harbour and Brownsea Island.

**Highlights**
- A free paddling pool from May to October
- A promenade suitable for wheelchairs and pushchairs
- Excellent beginner’s windsurfing, kayaking or canoeing area
- A large adventure playground for young children and the Challenger Play Area for older children
- Beach hut hire
- A green gym

**Facts**
- Coastal Change
  - Hamworthy is situated on a low-lying flood plain. The sea defences (the promenade and groynes) currently protect this area but its height will need to be raised for protection from future storm and flooding events.
  - History
    - A port at Hamworthy was built by the Romans around AD44 to provide supplies to the army fighting against the Celtic tribe, the Durotriges.
    - The port was later used as a place for Late Iron Age settlers to extract salt.

Wareham

The ancient market town of Wareham provides an excellent day out or serves as a base for visiting the Purbeck countryside. The town dates back over 2,000 years.

**Highlights**
- Three different riverside walks ranging from 2¼ to 3½ miles
- Bird spotting at Swineham and Bestwall
- Historical sites such as Saxon walls, the church and local museum
- Boat cruise along the Frome – both up and down the river
- A 10 mile cycle path to Wareham forest or the 6 mile cycle route to Arne

**Facts**
- Coastal Change
  - There is potential for an intertidal habitat to be created in the Wareham floodplain to compensate for lost habitats in Poole Harbour.
  - Although this town is considered to be inland, the tidal river could be affected by sea level rise as the river may flood the surrounding areas more often.
  - Flood embankments along the eastern fringes of marshland have prevented lots of the land surrounding Wareham from being lost to rising water levels.
- History
  - The Saxon walls around the town were built during King Alfred’s reign in order to provide defences for three sides of the town. They can still be seen today.
  - The town was set ablaze in 1762 and was largely destroyed. The residents had to wait a year before the government gave permission to rebuild it.
- Wildlife
  - The Bestwall and Swineham marshes and rivers provide an excellent habitat for wading birds, dragonflies and damselflies.
  - The rare Cetti’s Warbler can be spotted along the banks of the River Frome.
Arne has a mix of woodland and heathland combined with coastal views. It is managed by the Royal Society for Protection of Birds (RSPB) who have been awarded (2014) a grant to create a new interpretation centre at the site.

**Wildlife**

Arne is one of the few places in Britain where you can find all six of our resident reptiles. The reserve has up to 22 species of dragonflies and is home to the rare Dartford Warbler.

**Highlights**

- Bird spotting such as Great Spotted Woodpecker, Osprey and the Black Tailed Godwit
- Regular activities/events by the RSPB
- Cycle paths in the reserve
- Sika deer seen roaming and grazing
- Walk to Shipstal beach

**Coastal Change**

Before 1870, these bays were mudflats. The marsh protects the old shore from erosion.

**History**

Craters, which are now ponds, can be found all over Arne. These were made from a barrage of bombings during WWII when the site was used as a decoy to attract bombs away from where cordite (explosives) was being made in Holton Heath. The soldiers attracted the attacks by lighting fires to make it look like buildings were on fire and it worked well as 206 bombs fell in one night.

Arne Bay was the site of a nursery from which the main marsh plant here (*Spartina anglica*) was exported all over the world to help with coastal defence and land reclamation.

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Brownsea is the largest of eight islands within Poole Harbour and is owned by the National Trust. The Dorset Wildlife Trust manages an area as a wildlife reserve where there is a large brackish lagoon. The Island is only accessible by boat from Poole Quay and Sandbanks. There is a landing fee for the island.

**Facts**

Coastal Change

The island was formed from when post glacial sea level rise caused the flooding of the river valley and isolated individual hills. Wave action continued to erode the hill and form the present day shape of the island. The shallow water and small tidal range allowed certain species to colonise the island.

The lagoon originates from a salt marsh which was drained for cattle grazing in the mid 19th Century.

The seawall, that protects the lagoon, is often overtopped during big storms.

The old sea defences on the Western end and South side of the island were failing and were removed, therefore allowing natural processes to take place there.

**Wildlife**

Mrs Bonham Christie, a past owner of Brownsea, lived a reclusive life and let her farm animals roam free. This led to the return of natural heath and woodland on the island which is important for wildlife today.

Two of the many fungus species found here are rare – the “Death Cap”, which can be fatal if eaten and the Earthstar, which resembles a star when it rains.

**Highlights**

- Wildlife spotting – Sika deer, Peacocks and the famous Red squirrels.
- Orienteering pack available from the National Trust
- Beachcombing and bird watching
- All terrain buggy available for hire

**History**

In the 1870’s a village called Maryland was built on the island to house workers attempting to manufacture porcelain.

The world’s first recognised Scout camp, organised by General Baden Powell, was held here in 1907.
Southern Poole Harbour & the Islands

**Facts**

Coastal Change
Furzey and Green Island were thought to be part of a much larger island around 2,000 years ago but since then erosion and an increase in sea level has separated them.

Very narrow shallow channels between some of the small islands mean that it is only possible to sail between them at high tide.

Two of the channels in the harbour are dredged on a regular basis to keep them at 7.5m deep. The dredged sediment is then distributed along Poole Bay.

History
These islands are relics of hilltops; they were once peaks within a hill range but gradually became islands when Poole Harbour flooded.

Old stone structures from the mainland to Green Island can be seen and are believed to be either a causeway or two ports. If they are ports, they are the oldest port structures in North West Europe, dating back to 250BC.

Round Island was requisitioned by the Royal Navy and used as a training ground in 1940. It is currently the only one of the smaller islands that the public can rent a holiday cottage on.

Geology
Oil wells, for the largest onshore oilfield in Western Europe, are hidden on Furzey Island and the Goathorn peninsula on the Southern side of the harbour. The oil was discovered at Wytch Farm in 1973 and the company who owns it maintain and manage the surrounding trees.

**Wildlife**

The introduced Sika deer on Brownsea Island swam to the other islands and inhabited them. They can be a problem as they trample marshland plants which are important for wading birds.

A Sea squirt, *Styela Clava*, is a non-native species of animal that have colonised in the area. It is thought they first hitched a ride on boats into the harbour at the end of the Korean War in 1951.

**Highlights**

Sika deer and Red squirrels

Bird spotting from the boat to see many species such as Black-tailed Godwit, Curlew, Redshank, Little Egret, Ringed Plover and Wigeon

Wildlife

Large rocks around Swanage Bay provide shelter for lobsters and crabs.

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**Coastal Change**

The first coastal defences date back to pre-1900 when a stone wall and groynes were built to stabilise the beach.

Due to its position at the bottom of a valley, where several rivers meet, Swanage has a flood alleviation scheme which diverts excess water from the town to the sea.

The beach was recharged in 2005 and may need to be done regularly in future to preserve it as sea levels rise and coastal erosion rates increase.

**History**

The railway from Swanage and Corfe Castle to the mainline at Wareham was closed in 1972 by British Rail. It is now operated by the volunteer-run Swanage Railway Trust and the first London to Swanage Diesel train ran in 2009.

The £1.47m Coastal Communities Fund was awarded to connect the railway from Swanage to Wareham. The first train hopes to run in 2015.

**Swanage**

A traditional seaside town which flourished in the Victorian era due to its beautiful location.

Swanage pier for great views or access to diving, sailing or fishing

The heritage steam railway travels between Swanage and Norden (close to Corfe Castle village)

The Jurassic coast - Cretaceous chalk cliffs on the north side of Swanage Bay

Sandy beach and shallow water

Durlston Country Park & Nature Reserve

The front of the Guild Hall was originally built for the Mercers’ Hall in Cheapside, London but was transported down by George Burt who was determined to ‘improve’ his hometown. He also brought the Town Hall clock from London.

Wildlife

Large rocks around Swanage Bay provide shelter for lobsters and crabs.

The pier provides a feeding ground for John Dories, Sea Bass and Gobies.
Studland is a National Nature Reserve and has a large dune system and white sandy beaches. It is managed and owned by the National Trust.

Coastal Change

Little Sea used to be open to the sea but was closed off by sand dune accumulation in the early 19th Century. It now remains an acidic habitat which is a haven for bird life.

Some areas like the beach huts have been protected by rock gabions in the past but as these defences deteriorate there will be limited intervention. The National Trust are looking towards new designs of infrastructures which could be easily moved back to coincide with erosion over time.

A rock armour structure was put in place to prevent the mouth of the harbour silting up in 1890’s. This led to an artificial build up of sand in North Studland.

History

Studland Beach was used for D-Day landing practice during WWII; Churchill, Eisenhower and King George VI used the observation bunker, called Fort Henry, to watch these rehearsals.

An area of Knoll Beach has been designated as a naturist area since the 1920’s - it is clearly marked and there is a Heather Walk Trail which takes you around the area to avoid it.

Wildlife

The Spiny Seahorse can be found in Studland Bay. Reports indicate that they have been there for at least 60 years.

Seagrass meadows found here provide protection for the seahorses, a food source for wildfowl and breeding grounds for fish and shellfish.

Studland Bay is home to a flock of wild, Ring-necked Parakeets.

Coastal Change Explained

What is it?

Coastal change happens as a result of natural processes. The coast has always changed due to the actions of wind, waves and tides. Natural changes can happen in the long term for example the accumulation of the present Studland sand dunes took place over 600 years and the flooding of Poole Harbour happened over 8000 years. Change can also happen in the short term such as during big storms and cause damage to sea defences, local infrastructure and loss of the beaches. The storms of 2013/14 saw unprecedented amounts of beach loss along the south coast - at Studland a year’s worth of erosion happened over a couple of months. Humans can have a role in coastal change through land reclamation and the deliberate changing of coastlines to suit our needs.

Sea defences can also have an impact on coastal change processes with hard defences such as sea walls and groynes protecting one area but possibly causing degradation further down the coast. They can hinder natural processes needed to accumulate sand dunes and beaches.

What is...?

An Intertidal Habitat?

An area of the foreshore and seabed which is covered at high tide and uncovered at low tide. Marine wildlife which live in the intertidal zone have to adapt to periods of exposure to the air as well as periods of being submerged at high tide.

Erosion?

With regard to coastal change in the area, erosion is primarily a natural process caused by the actions of wind, waves and tides as well as frost and rainfall. These actions contribute to the transportation of sediments and the weathering of the land. This transportation of sediment can lead to sediment build up, which can change habitats, or loss of sediments which can decrease beach widths.

Examples include:

- Cliffs at Swanage being eroded
- Sediment accumulation in the River Frome leading to shallowing of the Wareham channel
- Loss of beach width at Sandbanks

Accretion?

In geological terms, accretion is the addition of sediment to an area which can result in creating a land mass or adding to an existing land mass.

Reclamation?

Reclamation is the process of reclaiming land or gaining land from the sea, wetlands, or other water bodies. It can also mean the restoration of land that has been degraded by human activities or natural processes. Examples include wasteland or landfill sites.

Sea Level Rise (SLR)?

Rising sea levels are largely because of the thermal expansion of the ocean as temperatures increase and because ice sheets and glaciers melt. Best estimates currently state that global sea levels will rise between approximately 50 -100cm in the next 100 years (IPPC Fifth Assessment Report). The UK National Tide Gauge Network (www.ntslf.org) has 44 gauges in UK waters which have measured SLR and indicate that during the 20th century the level rose by 12cm. Indications show this rate of increase is accelerating. Recent readings for Bournemouth tide gauge (nearest location) suggest a SLR approaching 5mm a year.

Facts

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Highlights

Designated trails through the sand dunes and woodlands

Views of Old Harry Rocks and the Isle of Wight

An eco-friendly discovery centre with events and activities run by the National Trust

Bird spotting at Little Sea, a mile long freshwater lake

Explained

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A Shoreline Management Plan (SMP)?
In simple terms, SMPs are plans of how coastal change in the area is managed now and in the future. SMPs are Government plans through which local authorities and agencies provide a framework for sustainable coastal protection policies within each coastal area. They aim to balance the perceived risks over a long period with the needs of people, whilst allowing natural processes to continue unhindered, wherever practicable. The Environment Agency defines them as “a large-scale assessment of the risks associated with coastal processes and helps reduce these risks to people and the developed, historic and natural environments. Coastal processes include tidal patterns, wave height, wave direction and the movement of beach and seabed materials”. The Poole and Christchurch Bay Shoreline Management Plan (often referred to as the Two Bays SMP2) includes Poole, Wareham, Swanage and Studland within its boundaries. Areas of the coastline are divided into ‘cells’, which are defined by the character and coastal processes taking place there. There is a specific management plan for each “cell” which can be seen at: www.twobays.net/smp2.htm

The Poole Bay, Poole Harbour and Wareham Flood and Coastal Erosion Risk Management Strategy?
The Poole Bay, Poole Harbour and Wareham Flood and Coastal Erosion Risk Management Strategy links with the Shoreline Management Plan. It sets out the policies for this area of coastline and provides details about what this will actually mean for this area. The strategy was developed by the Environment Agency in partnership with local authorities (Dorset, Bournemouth, Poole and Purbeck), Natural England, English Heritage, the National Trust, RSPB and Poole Harbour Commissioners. Following a public consultation, the Strategy was adopted and signed off in February 2014 by the relevant authorities. The full document is available to view from: www.gov.uk/government/uploads/system/uploads/attachment_data/file/292781/LIT_8830_2c772f.pdf

A Sea Defence?
Sea defences protect the coastline and land behind. There are:

Hard Defences: Concrete, wooden or stone structures to try to prevent coastal erosion which work by either dissipating wave energy or trapping sand and shingle on the beach so it can’t move along the shoreline. Examples include rock groynes, gabions, offshore breakwaters and sea walls.

Soft Defences: Approaches which manage erosion rather than try to prevent it. Examples are water drainage pipes to stop accumulation of water on cliffs or beach nourishment to add sediment to the beach when sediment is lost.

Natural shoreline habitats like Seagrass meadows and salt marshes absorb wave energy and can slow down erosion therefore protecting these habitats could be a form of defence.

Coastal Squeeze?
Coastal squeeze is the term used to describe what happens to coastal habitats that are trapped between a fixed landward boundary, such as a sea wall or old cliffline and increased storminess and/or rising sea levels. The beach or areas of salt marsh are effectively ‘squeezed’ between the two, the rising tide and the hard defence, and diminish in quantity and/or quality, increasing stresses on the habitat which could eventually be lost. Examples of where coastal squeeze is happening include the Studland sand dunes which are being lost and areas around southern Poole Harbour where saltmarshes are being reduced in area by coastal squeeze combined with natural adjustments within the saltmarshes themselves.

Challenges and Opportunities for Tourism Businesses

<table>
<thead>
<tr>
<th>Challenges</th>
<th>Opportunities</th>
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<tbody>
<tr>
<td>Fresh water scarcity and rising temperatures could bring increased costs for air conditioning and water rates for tourist business</td>
<td>Consider installing a water butt or alter furnishing to suit rising temperatures such as ceiling fans, lighter duvet covers or blinds instead of curtains. It could save money in the long term</td>
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<tr>
<td>Increased storm events and wetter winters could lead to a decrease in coastal tourism during the winter season</td>
<td>Hotter, drier and longer summer periods may increase the length of the typical tourist season</td>
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<tr>
<td>Businesses could find it difficult to operate if there is reduced access to the coast from flooding and storm events which could cause damage to roads, buildings and coastal attractions. The EA have produced a flood map where users can see if their property is at risk; <a href="http://maps.environment-agency.gov.uk/wiyby/wiybyController?x=357683.0&amp;y=355134.0&amp;scale=1&amp;layerGroups=default&amp;ep=map&amp;textonly=off&amp;lang=">http://maps.environment-agency.gov.uk/wiyby/wiybyController?x=357683.0&amp;y=355134.0&amp;scale=1&amp;layerGroups=default&amp;ep=map&amp;textonly=off&amp;lang=</a> &amp;topic=floodmap</td>
<td>Building designs could be changed to adapt to coastal change e.g. beach huts could be designed to become more moveable</td>
</tr>
<tr>
<td>There may be a potential for increased staff issues associated with events happening due to coastal change e.g. stress from flooding or unable to get to work</td>
<td>Increase staff awareness of flood risks and prepare alternative routes in case of disruption</td>
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<tr>
<td>Birdwatchers may come at different times of the year as migratory birds are arriving later in the season</td>
<td>Changing migratory bird patterns may increase the tourism season</td>
</tr>
<tr>
<td>Measures required to improve coastal defences could affect the attractiveness of certain sites</td>
<td>There could be opportunities to promote different sites in the local area as the landscape changes</td>
</tr>
<tr>
<td>If designated areas, that are unique to the coastline, continue to be managed and protected it could keep tourists who are interested in wildlife coming to the area</td>
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### Challenges

| Changes in coastal habitats and loss of beaches will present a challenge for businesses reliant on these attractions |
| Coastal squeeze of important habitats could lead to a loss of species and there could be loss of some of the popular beaches |
| Loss of popular wildlife might mean visitors go elsewhere to see these species |

| Loss of intertidal areas could mean the loss of access to some archaeological remains |
| There may be an increase in pests and diseases which may affect water quality and the attraction to visitors |

### Opportunities

| Businesses reliant on coastal areas/attractions could diversify their business to adapt to the changing coastline |
| The UK Government are legally obliged to create new habitats to compensate where old protected habitats are lost. They are currently looking for locations for this and with land owner permission, areas such as Wareham banks and the Ridge could be turned into a safe haven for declining bird populations. This could be a new tourism offer |
| New fish species coming into the area could present an opportunity to offer and promote these on local menus |

| Changes in different wildlife may mean an increased market for wildlife tourism - therefore creating new marketing opportunities e.g. more recreational fishing holidays |
| Change to the coast may uncover new archaeological remains and keeping up to date with this could attract new tourists |
| There may be the opportunity to market preventative against pests such as mosquito repellent or nets |

### Other Opportunities

| Promotion of different watersport activities in the area e.g. kitesurfing, kayaking and boat angling due to better summers and warmer waters leading to a rise in participation |
| The realignment of tide banks on the rivers at Wareham might create further opportunities for moorings or other boating activities |
| New tourism community groups could be formed to tackle coastal change issues and to help with marketing of the area in a positive way |

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**Adapting to Coastal Change for Tourism Businesses**

Adapting to coastal change is important both in the long term and short term when extreme events occur. Within the tourism industry, being prepared and taking appropriate action is key.

### Step 1

**Become Informed**

Within the tourism industry, it is important to understand how our nearby coast is changing and look at what challenges and opportunities this might bring. There is lots of useful information available to help you become better informed.

### Step 2

**Take Action**

Take practical action – there are lots of ways to make small changes that will help your business.
Shoreline Management Plans - are government plans through which local authorities and agencies provide a framework for sustainable coastal protection policies. The plan looks at the perceived risks over a long period with the needs of people, whilst still allowing natural processes to continue unhindered, wherever practical. The Poole Harbour and Christchurch Bays Shoreline Management Plan (2010) is the plan for the Poole Harbour, Studland and Swanage area: www.twobays.net

National Adaptation Programme (2013) - sets out what government, businesses and society are doing to better adapt to the changing climate. Its aim is to increase the resilience of businesses to climate extremes and encourage them to put in long-term measures to adapt to climate change: www.gov.uk/government/publications/adapting-to-climate-change-national-adaptation-programme

Poole Harbour Aquatic Management Plan - provides a framework for coordination between statutory bodies with responsibilities in Poole Harbour. It promotes the safe and sustainable use of Poole Harbour, balancing the demands on its natural resources, minimising risk and resolving conflicts of interest: www.pooleharbouraqmp.co.uk

Climate South West - lots of information about climate change and the impacts it might have on your business. In the Resources section, there are case studies to help you understand what other businesses are doing and a section specifically on how climate change will affect the tourism industry: www.climatesouthwest.org/tools/tourism

Living with a Changing Coast film - a python-esque film (6 mins) about how our coastline (particularly Poole Harbour) has changed throughout the ages and how it could change in the future. The film has been produced for the Living with a Changing Coast project by Tim Britton from the Forkbeard Fantasy multi-arts company: www.forkbeardfantasy.co.uk / http://www.youtube.com/watch?v=iTPOLMeWbI

Climate Prepared - provides an online toolkit which helps you assess the risks to your business and identify the practical actions you can take. It also provides a personalised summary of advice for your business. There are case studies on the website which shows how other businesses in the tourism industry have adapted. They also have useful guides ranging from insurance for small businesses to integrating climate change into a business strategy. It has been developed by Climate South East, Climate South West, Tourism South East and The South West Tourism Alliance. You need to register but this is free at: www.climateprepared.com/index.php/register

Environment Agency Flood Warnings - sign up for free flood warnings for your home and/or business – this gives you time to prepare for any potential action: https://fwd.environment-agency.gov.uk/app/olr/register

Find out about 3 day flood risk forecasts on the live flood warning map at: http://apps.environment-agency.gov.uk/flood/31618.aspx

Make the most of the opportunities - become more resilient

Did you know...

UKCIP - helps businesses adapt to changing climate through practice based research, and by providing support and advice. The Adaptation Wizard is a useful and comprehensive guide to getting started on adaptation for your business. It will help you create a Local Climate Impact Profile for your business which essentially helps you assess your businesses exposure to the weather: www.ukcip.org.uk. An example of a LCIP is the Bournemouth and Poole Council LCIP and can be viewed at: www.bournemouth.gov.uk/Environment/GoGreenBournemouth/Extreme-Weather-and-Climate-Change/Extreme-Weather--Climate-Change.aspx

Step 1

Become Informed

Step 2

Take Action

Information on the relevant plans (and policies) relating to the changing coast includes:

1. Shoreline Management Plans
2. Poole Harbour Aquatic Management Plan
3. UK Climate Change Risk Assessment: Government Report
4. National Adaptation Programme
5. Climate South West
6. Living with a Changing Coast film

Take practical action – there are lots of ways to make small changes that will help your business:

1. Climate Prepared
2. Environment Agency Flood Warnings
3. Find out about 3 day flood risk forecasts
4. Make the most of the opportunities - become more resilient
1. **Staying Safe** - always encourage visitors to take warning signs at coastal locations seriously. Keep an eye on beaches, landslides and other closures at: www.dorsetforyou.com. Perhaps look for an alternative to offer.

2. **Respect the local wildlife** - lots of important wildlife reside or visit Poole harbour and its surrounding area, promotion of it helps keep it that way.

3. **Visitors with dogs** - dogs should always be kept on a lead on heaths, wetlands and downs to prevent disturbance. There are also restrictions on dog walking on some beaches like Sandbanks, Studland and Swanage. www.dorsetdogs.org.uk/dorset-dogs-doggy-do-code.html

   Information on dog friendly beaches at www.icoast.co.uk

4. **Litter Free Coast and Sea** - a campaign to keep our local sea and coastline free from litter and help improve bathing water quality. www.dorsetforyou.com/litter-free-coast. As a business there is a free accreditation award to promote to your visitors and help with the local environment.

5. **Get Involved** - there are so many activities to try and family events to go to while on holiday which involve our ever-changing coast. Find out more at:

   - iCoast www.icoast.co.uk
   - Poole Tourism www.pooletourism.com
   - The National Trust at Studland www.nationaltrust.org.uk/studland-beach/things-to-see-and-do/events
   - The National Trust at Brownsea www.nationaltrust.org.uk/brownsea-island/things-to-see-and-do
   - Visit Dorset www.visit-dorset.com
   - Dorset Wildlife Trust www.dorsetwildlifetrust.org.uk/events.html
   - RSPB www.rspb.org.uk/reserves/area/
   - Upton Country Park www.uptoncountrypark.com/events.html
   - Swanage Town Council events www.swanage.gov.uk/FestivalsEvents.aspx
   - Jurassic Coast www.jurassiccoast.org
   - Wareham Town Council events www.wareham-tc.gov.uk
   - Durlston Country Park & Nature Reserve www.durlston.co.uk

As a business, you are important ambassadors for the local coastal area:

Many activities to get involved with:
LiCCo is a cross-channel project helping coastal communities to better understand and prepare for the impacts of climate change, including sea level rise and erosion on their coastline. Partner organisations from Devon, Dorset and Normandy are working together on this part European-funded project, led by the Environment Agency. The project covers a period of 4 years, from April 2011 to April 2015. For more information: www.licco.eu.

This booklet has been produced on behalf of LiCCo by the Dorset Coast Forum. The Dorset Coast Forum is an independent strategic coastal partnership, hosted by Dorset County Council, which works across sectors and with communities to look at the long-term broad scale issues facing the Dorset Coast and inshore waters. For more information: www.dorsetcoast.com.

For more information about the LiCCo project or The Dorset Coast Forum Call: 01305 224833. Email: dorset.coast@dorsetcc.gov.uk.

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All photos are Dorset Coast Forum’s if not credited below:

Produced in June 2014.
Written by: Rhiannon Jones and Bridget Betts with input from the LiCCo team
Edited by: Professor Vincent May
Supported by: Rowena Taylor: www.rowenataylor.co.uk

Disclaimer:
This guide has been produced using a variety of experts and up-to-date information. We do not take responsibility or liability if the information is incorrect.
Tourism Business Guide to Understanding Coastal Change

Raising awareness and providing ideas for Poole Harbour and the surrounding area

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