

### Winners:

- Longer, warmer summers could increase tourism on the coast and may boost local economy.
- Increased marine activity – but this could also result in increased pressures on the coastal fringe.
- The distribution of some flora and fauna may become more widespread and the range of some habitats may expand.
- Some new historic sites/ sites of geologic interest may be revealed by erosion – Lepe cliffs may be showing the geology of the old Solent river.
- Erosion of cliffs may provide new habitats e.g. solitary bees at Lepe mining in to the loose cliff surface.

### Losers:

- Ahead are the Keyhaven Marshes – home to ~7,500 pairs of nesting birds – nest offshore to avoid predators. Mudflats too – home to anything up to 300,000 individual mud snails – these are the food source for the many birds that come here. Erosion of offshore marshes – possibly due to passing boats (e.g. the new ferries are much bigger), and also due to sea level rise. If the marshes and mudflats disappear will the birds come here to nest and feed?
- Rising sea levels (4-6mm per year) and possible increased storminess will increase coastal erosion and damage coastal infrastructure.
- Loss of coastal natural assets such as beaches, wetlands, mudflats, salt marshes and dunes, and their associated flora and fauna.
- We're on part of the sea wall – built in 1990 after a major flooding of the NR. Replacement of existing sea defences unlikely to be affordable – estimated to cost £30 million to re-build.
- Loss of historic sites (e.g. Hurst and Calshot castles), as well as homes and holiday homes.



## Calshot Castle

- Built in 1539
- Located at the end of Calshot spit and threatened by increasing sea levels



## Periwinkle

- Periwinkles thicken their shells to prevent crab attacks
- Climate change leads to more acid sea water which stops the periwinkles shell from thickening



## Beach huts

- Found along the New Forest coast
- Suffer from damage during fierce winter storms



## Oyster

- A shell with two halves
- Warmer seas lead to smaller, less robust oysters



## Anemone

- Found in shallow waters of the New Forest coast
- Prefers warmer waters



## Solitary bees

- Live in burrows on soft cliffs
- More erosion will create more habitats for the bees



## Shore crab

- Lives in the sea and on the beach and can survive in temperatures from 0-30°C
- Carnivorous – likes to eat sea shells such as periwinkles and oysters



## Glasswort

- Common plant found only on the salt-marshes
- Would be threatened by storms and erosion of the marsh



## Sea Kale

- Survives on shingle on the beach
- Has tough leaves that are drought resistant



### **Brent Goose**

- Spends the winter on the New Forest coastal marshes
- Returns to Siberia in the summer months



### **Long-horned poppy**

- Rare species only found on shingle beaches
- Tough waxy leaves to avoid drying out