

# Coastal Adaptation Challenges for the Big Society

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# What is a Shoreline Management Plan?

- A strategic assessment of risk from coastal processes
  - Flooding and coastal erosion (and sediment processes)
- To determine a sustainable approach to managing risks over next 100 year.
- It guides Flood & Coastal Risk Management planning and funding
- But, it also informs policy makers, politicians and the public of the implications of coastal change

# Cornwall and Isles of Scilly SMP

## Working in Partnership

The SMP Review has been completed on behalf of Cornwall and the Isles of Scilly Coastal Advisory Group (CISGAG). Members of CISGAG formed the SMP Client Steering Group, including representatives from the Local Authorities, Environment Agency, Natural England, English Heritage and the National Trust, who have overseen and guided the production of this plan. In addition, Elected Members Forums were established for both Cornwall and the Isles of Scilly Councils. These each comprised a number of elected councillors and provided guidance and representation of the local wards and Town and Parish Councils. They have also acted to formally endorse the plan and recommend its adoption to the Full Councils.

CISGAG commissioned consultant engineers Royal Haskoning to prepare the SMP and undertake the technical assessments. Coast and Country Projects Ltd were commissioned to undertake project management of the work. Funding has been provided by the Government through the Department of Food and Rural Affairs (Defra).

## The Action Plan

The Action Plan aims to capture all intended actions necessary, on a policy unit basis, to deliver the objectives at a local level. It should also help to prioritise flood and coastal risk management medium and long-term planning budgets. A number of the actions are representative of ongoing commitments across the SMP area.



## Further information

The final completed SMP Review document is available to view at the principal offices of Cornwall Council and the offices of the Council of the Isles of Scilly on St Mary's. It is also available to view or download at the Cornwall and Isles of Scilly Coastal Advisory Group - [www.ciscag.org](http://www.ciscag.org)

## CONTACT DETAILS

[www.ciscag.org](http://www.ciscag.org)

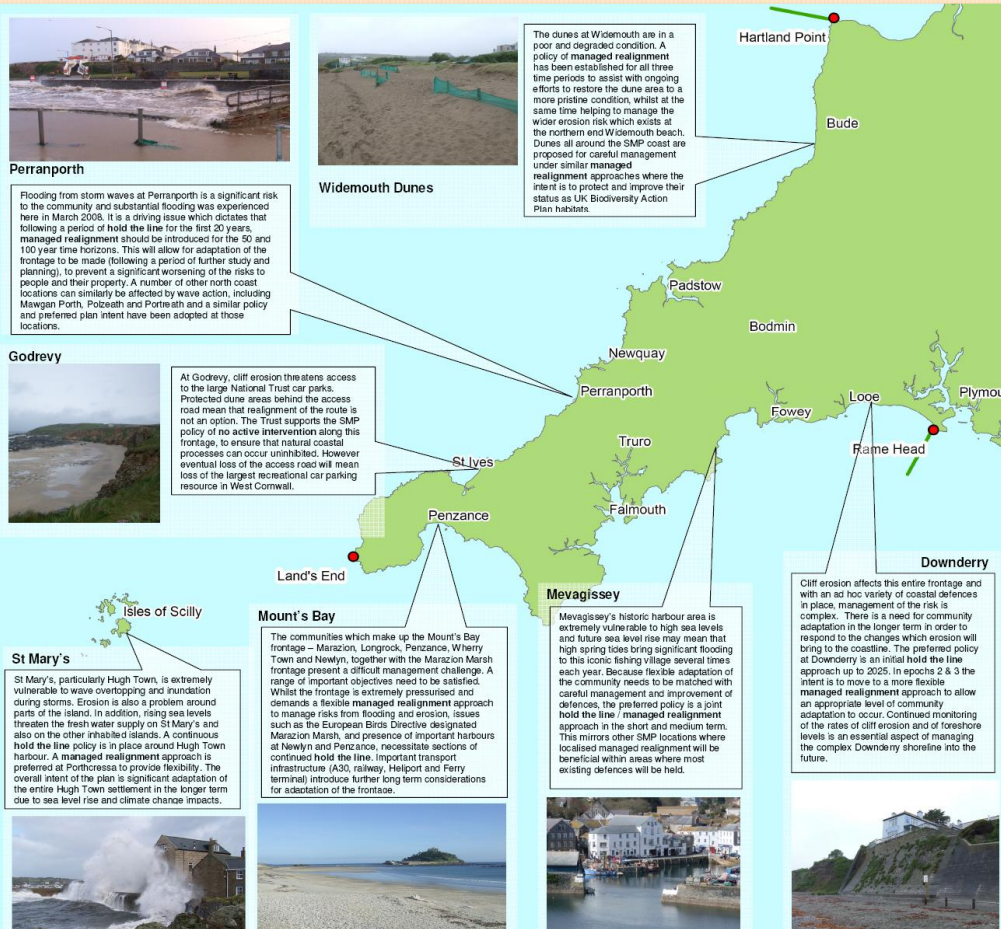
Cornwall Council Contact Tel: 0300 0 234 100

Isles of Scilly Council Contact Tel: 01720 422537

Torridge District Council Contact Tel: 01237 428700

Environment Agency Contact Tel: 08708 506 506

Natural England Contact Tel: 0300 060 2544



## Policy Development

The SMP Review provides a long-term policy framework over the next 20, 50 and 100 years to guide the management of the coast. The policy can change between these time periods (called epochs) to give communities time to adapt to coastal change. It is important to note that the implementation of these policies through specific actions is dependent on funding being available (not necessarily through the public purse) and the necessary planning and consents being in place. The SMP area is divided into 250 individual policy units, each with a preferred policy option for each of the three time periods up to the year 2105.

## SMP Policy Options

There are four management policies that can be considered by the SMP. These are set out in Defra's SMP guidance, March 2006.

<b>No active intervention (NAI)</b>	A decision not to invest in providing or maintaining built defences on the natural coastline.
<b>Hold the line (HTL)</b>	Actively maintain or upgrade the level of protection provided by built defences on the natural coastline.
<b>Managed realignment (MR)</b>	Manage the coastal processes to align the 'natural' configuration, either seaward or landward.
<b>Advance the line (ATL)</b>	Build new defences seaward of the existing defence line where significant land reclamation is considered.

## Headline Issues

Around the SMP coast there are a number of recurring issues which affect our communities, beaches, cliffs and natural habitats. Principally these are: cliff erosion; direct wave driven flooding on the open coast at exposed locations; still water flooding from high tides and storm surge at sheltered locations; coastal squeeze and loss of beaches where defences are present; degradation and loss of dune areas; degradation and loss of historic sites; loss of roads and highways.

Storm waves at Rinsey Head, November 2009



Often, one dominant issue affects a particular location - the SMP policy is then principally driven by that specific problem. At some locations however, a number of issues combine to make the risks more complex and we then have to meet a number of different objectives, which sometimes means compromise is necessary. The main location map to the left identifies a number of example locations which demonstrate these key issues and describes the rationale behind the policies. Because this SMP covers a large geographical area it is not possible in this summary to provide an overview of all policy units - for this the main SMP report should be consulted. However a Summary Document for the SMP has been produced which provides some additional details on policy and management approach at the key locations.

## Consultation

Seeking the views of the coastal communities and the key stakeholders (organisations like the National Trust, the Duchy of Cornwall, the Royal Society for the Protection of Birds and Wildlife Trusts) has been essential in selecting appropriate policy in each location. We have also consulted closely with elected councillors across the SMP area through Elected Members Forums. Throughout the review, a large number of local meetings, road show drop-in events and tailored presentations have been undertaken. The SMP Coastal Group website - [www.ciscag.org](http://www.ciscag.org) - will now host the full set of completed SMP Review reports.

## Monitoring

Ongoing monitoring of the coastal environment, including measuring sand levels on beaches, rates of cliff erosion and changes in the wave climate is essential to further develop our understanding of the coast and how it is responding to climate change and sea level rise. The South West Regional Coastal Monitoring Programme has since 2006 provided a very useful information resource for all coastal practitioners working in Cornwall. This programme covers the entire South West peninsula, including Cornwall and the Isles of Scilly, covering the open coast and the estuaries up to their normal limits. It is intended the programme will continue and be improved and refined for priority areas.



# Mounts Bay, Cornwall



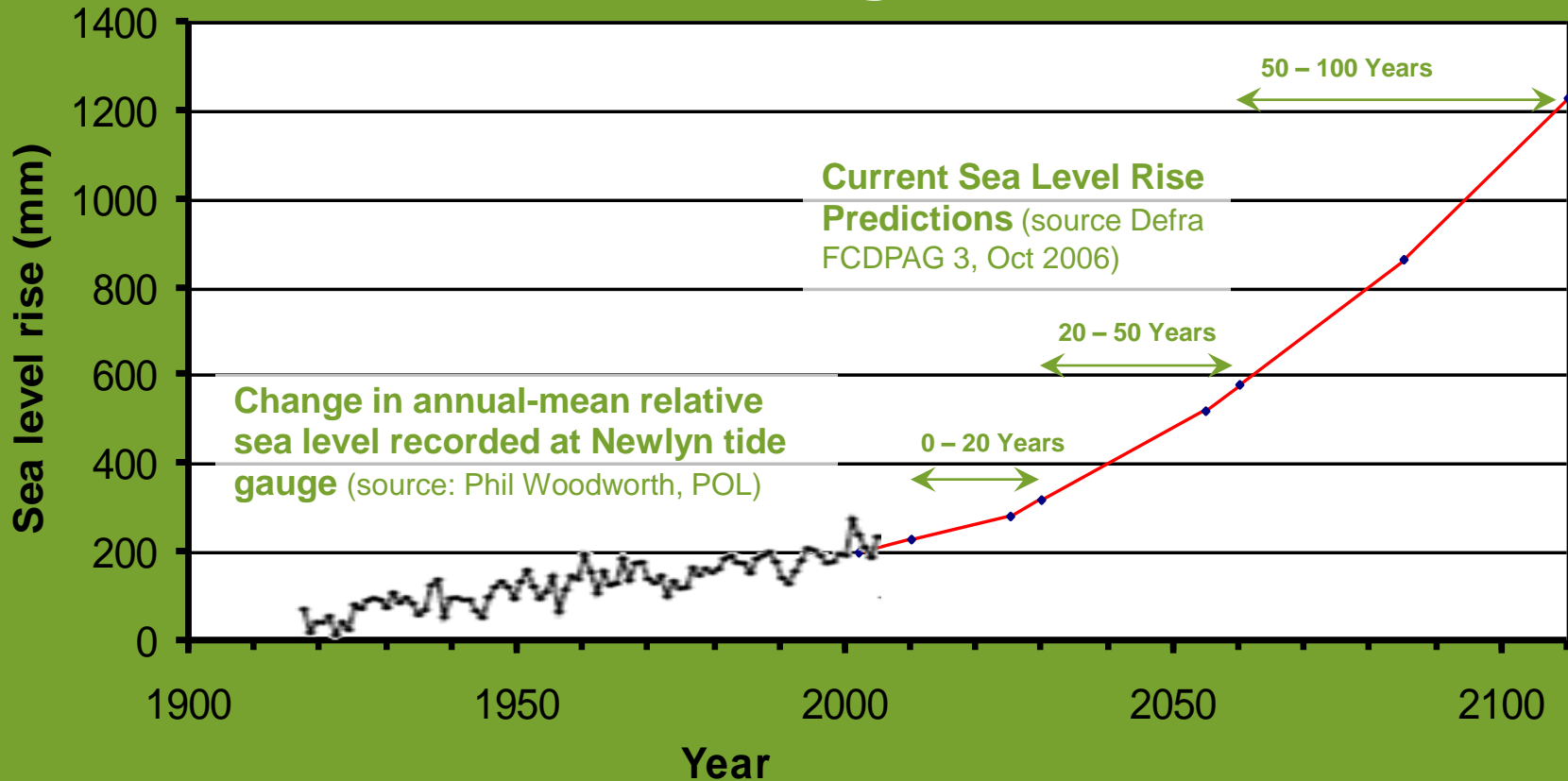


# Wherry Town Promenade



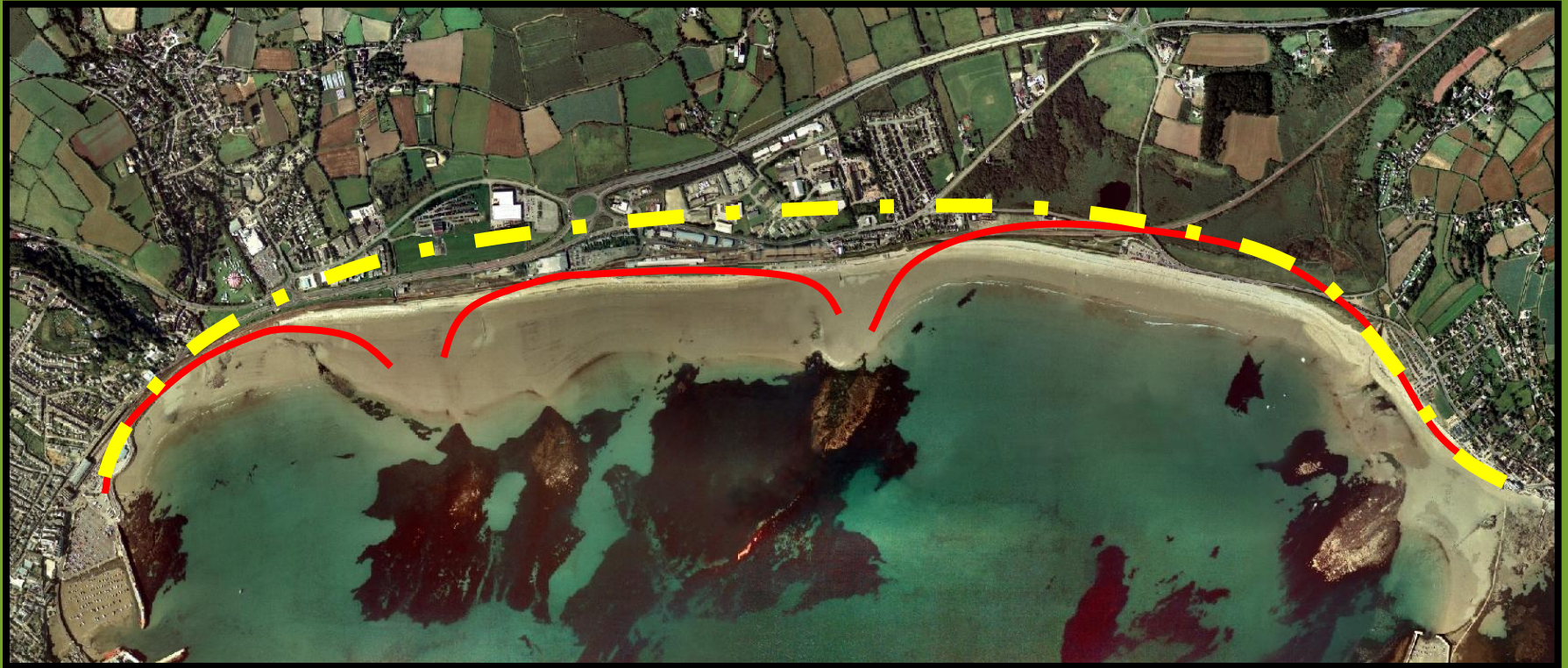


# Climate change prediction uncertainties and past coastal change

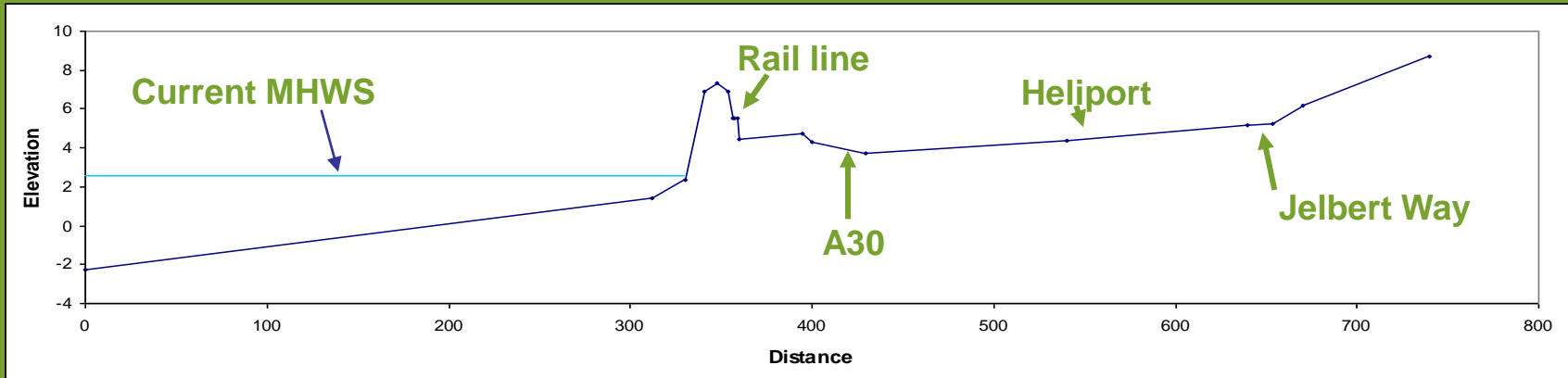


Observed changes in sea level from tide gauge at Newlyn, 1916 to 2004 (in black). Current sea level rise predictions from 2002 to 2110 (in red).

# Sensitivity of response to sea level rise



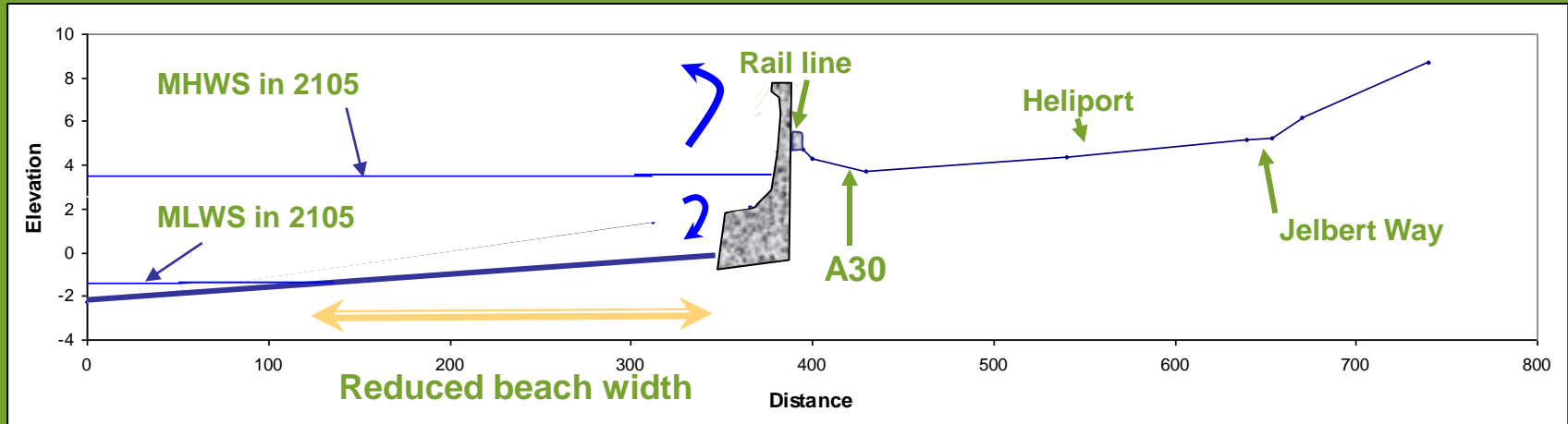
# Uncertainties in adaptation response



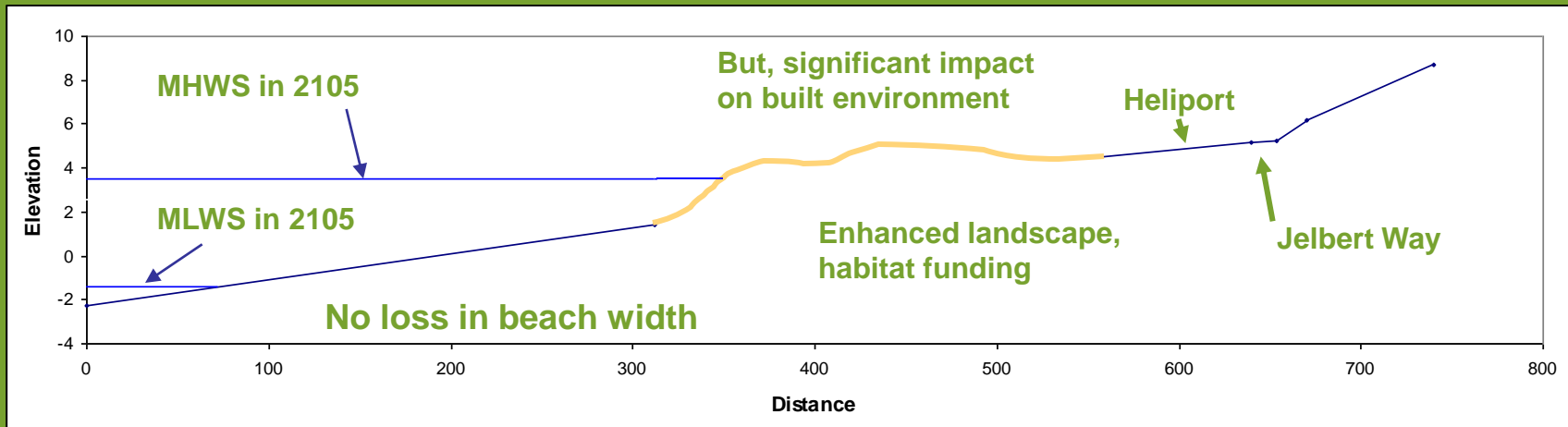
# Range of adaptation responses

## - what is managed realignment?

Realign the rail line to landward side of sidings



Replace hard engineered defence with managed sand dunes



# How to value adaptation responses



# Passing the batton



PENZANCE AND NEWLYN AREA FRAMEWORK PLAN  
**A Creative Maritime Town**

February 2011

AECOM



# Shoreline Management at Penzance

- ➔ The SMP highlights some of the challenges ahead
  - ➔ The Plan is available online
- ➔ But, the solution is a partnership:
  - ➔ Coastal management
  - ➔ Land Use Planning and management
  - ➔ Transport Planning
  - ➔ Community Engagement and participation
- ➔ The challenge for Big Society is to deliver a Sustainable Britain for Future Generations, local, national, and beyond, to enjoy.

# Links

## Coastal Advisory Group & Shoreline Management Plan

➔ [www.ciscag.org](http://www.ciscag.org)

## Coastal Monitoring Programme

➔ [www.channelcoast.org](http://www.channelcoast.org)

## Environment Agency's SMP webpage

➔ <http://www.environment-agency.gov.uk/research/planning/105014.aspx>

## National Trust – Shifting Shores

➔ [http://www.nationaltrust.org.uk/main/w-chl/w-countryside\\_environment/w-coastline/w-coastline-shifting\\_shores.htm](http://www.nationaltrust.org.uk/main/w-chl/w-countryside_environment/w-coastline/w-coastline-shifting_shores.htm)