

Glossary of Key Terms

Annual Exceedance Probability (AEP) – The chance of a flood of given size (or larger) occurring in one year. It can be expressed as a percentage (such as 1%) or a chance of occurrence (for example, 1 in 100)

Appraisal - The process of defining the problem, setting objectives, examining options and weighing up costs, impacts (positive and negative), risks and uncertainties in order to make to a decision.

Asset – Any property or object of value.

Benefit Area (BA) - A term the Project Term have developed to refer to the 11 individual flood and erosion cells or areas which the Strategy has been broken down into to undertake the Options Appraisal.

Benefit Cost Ratio – the total value of the benefits (assets protected by the option) divided by the costs. Under government guidance, to ensure the best use of tax-payers money, this has to be greater than 1 to ensure that the value of the assets being protected are of the same value and if not more than the cost of protecting them.

Coastal flooding – the flooding of the coastline due to wave overtopping or tidal surging.

Coastal squeeze - The process by which coastal habitats and natural features are progressively lost because they are prevented from migrating landwards in response to sea level rise.

Cost benefit analysis - Comparison of the value of benefits and costs as part of an economic appraisal.

Economic appraisal - An appraisal technique which is based on attaching monetary values to the costs and benefits of actions.

Economic justification – Following the economic appraisal a decision can be made if the option is taken forward based on the results. Based on government guidance this is if the Benefit Cost Ratio of the option is greater than 1.

Embankment – a mound, often made of earth, built along the coastline to protect against flooding.

Environmental designations – national and international protection orders placed on specific environments. Some of these designations are legally binding and will require protecting, or compensatory habitat of the same quality to be created.

Environmental scoring – a method used by the project team to help compare the environmental impacts of the different options. Scores determined based on a number of factors including impact on habitats, cultural heritage and society/communities.

Erosion risk – the risk associated with the landward retreat of the coastline.

Estuary – is a partially enclosed coastal body of brackish water with one or more rivers or streams flowing into it, but connected to the open sea.

Flood cell - This refers to the self-contained unit or area which is vulnerable to flooding. The unit may be analysed individually since it is mostly independent of flooding within other cells. The division of the area into flood cells has helped form the Benefit Areas for this Strategy.

Habitat Adaptation – an option that has been implemented to allow the more gradual change of the habitat from freshwater to intertidal. This is a more sustainable approach which promotes the development of a more natural estuary, and also reduces the potential adverse impacts on the designated habitat as there is a gradual change.

Habitat Regulations Assessment (HRA) - The aim of the Habitat Regulations Assessment (HRA) is to identify any aspects of the Strategy that would have the potential to cause a likely significant effect on Natura 2000 or European sites (Special Areas of Conservation (SACs), Special Protection Areas (SPAs) and Ramsar sites), and to begin to identify appropriate mitigation strategies where such effects were identified.

Hold the Line (HTL) – this involves maintaining or improving defences to keep the current shoreline position. A number of different HTL scenarios were assessed to understand the viability of improving the Standard of Protection (SoP) of the defences. See Figure 6 in the main document for more explanation.

Hydrology – the understanding of the movement of water, specifically in this Strategy related to the flow paths and distribution of water during flood events.

Intertidal – the area of coastline that is above water at low tide and under water at high tide.

Managed Realignment site - this involves moving the defences inland to allow a more natural estuary/shoreline to develop, and increase the space for water and habitats. High ground could form natural defences or new embankments could be built to maintain flood protection to assets landwards.

No Active Intervention (NAI) – there is no economic justification for realigning or replacing the defences, so nature is likely to take its course. There might be the option for private investment in the defences subject to licencing and approval

Operating authority - A body with permissive powers to undertake flood and coastal erosion risk management activities. This is usually the Environment Agency, Local Authority or Internal Drainage Board

Partnership Funding (PF) score – the method used to calculate the amount of government funding a scheme is eligible for. The score is provided as a percentage. The percentage equates to the percentage of the cost of the scheme that could receive funding, subject to the remaining costs being met by third parties e.g. Local Authorities, local developers and local businesses. The score is calculated based on the value of the assets protected with the option, the number of households that are better protected by the option and any statutory environmental obligations that are met through the option e.g. creation of intertidal habitat.

Residual life – the remaining life of the current defences if no maintenance were to be undertaken. This is assessed based on the current condition of the defences.

Revetment – sloping structures placed along the seaward side of the coastline to absorb the wave energy, and protect the shoreline from erosion. They are often made of rocks or concrete faced structures.

Seawalls – the construction of walls along the shoreline to protect against flooding. Similar to an embankment, but often made of concrete or masonry.

Sediment movement – The process through which materials are transported.

Shoreline Management Plan (SMP) - a high level policy document for coastal management which provides a large-scale assessment of the risks associated with coastal evolution and presents a policy framework to address these risks to people and the developed, historic and natural environment in a sustainable manner. The document outlines the most sustainable approach to managing the flood and coastal erosion risks to the coastline over three timescales short-term (0 to 20 years), medium term (20 to 50 years) and long term (50 to 100 years). The SMP is a non-statutory, policy document which takes account of other existing planning initiatives and legislative requirements, and is intended to inform wider strategic planning. It does not set policy for anything other than coastal defence management.

Site of Specific Scientific Interest (SSSI) – a national environmental conservation designation. Includes both sites for biological interest and geological interest. These sites have to be legally protected. As such, they sometimes pose a constraint on the type of defences that can be constructed in an area.

Special Protection Area (SPA) - Areas designated for rare or vulnerable birds or migratory birds and their habitats, classified under Article 4 of the EC Directive on the Conservation of Wild Birds.

Stakeholder – A stakeholder is any individual, group of individuals, organisation or political entity, including the public, interested in or affected by a decision to be made. They may be, or perceive that they may be, affected either directly or indirectly by the outcome of the decision.

Standard of Protection (SoP) – The level of protection from flooding the defences provide. This is usually expressed in the size of flood the option protects against.

Strategic Environmental Assessment (SEA) - A process set out in European and domestic legislation to ensure that significant environmental effects arising from Policies, Plans and Programmes are identified, assessed, mitigated, communicated to decision makers, monitored and that opportunities for public involvement are provided.

Treasury Green Book - A publication of Her Majesty's Treasury providing guidance to public sector bodies on how proposals should be appraised, before significant funds are committed. It also outlines how past and present activities should be evaluated, encouraging a thorough, long-term and analytically robust approach to appraisal and evaluation. It is relevant to all appraisals and evaluations.

Water Framework Directive (WFD) - The Water Framework Directive (WFD) (2000/60/EC) is designed to improve and integrate the way water bodies are managed throughout Europe. It came into force on 22 December 2000, and was put into UK law (transposed) in 2003. Member States must aim to reach good chemical and ecological status in inland and coastal waters by 2015.

Acronyms

AEP – Annual Exceedance Probability

AOD – Above Ordnance Datum

BA – Benefit Area

BCR – Benefit Cost Ratio

DEFRA – Department of Environment, Food and Rural Affairs

FCRM – Flood and Coastal Risk Management

GiA – Grant in Aid

HTL – Hold the Line

LPRG – Large Project Review Group

MEASS – Medway Estuary and Swale Coastal Flood Strategy

MR – Managed Realignment

NAI – No Active Intervention

OBC – Outline Business Case

PF Score – Partnership Funding Score

RFCC – Regional Flood and Coastal Committee

RL – Residual Life

SEA – Strategic Environmental Assessment

SLR – Sea Level Rise

SMP – Shoreline Management Plan

SoP – Standard of Protection

SPA – Special Protected Area (Environmental Designation)

SSSI – Site of Special Scientific Interest

TEAM2100 – Thames Estuary 2100 Strategy