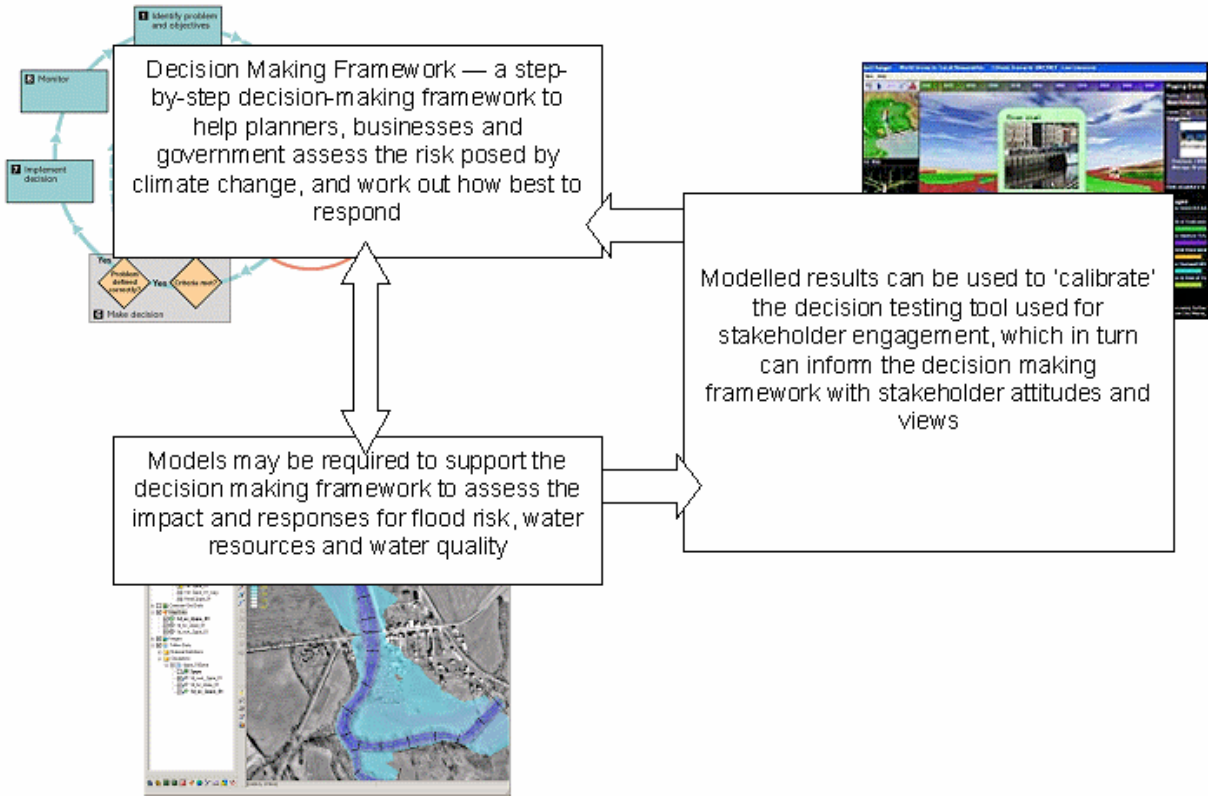
Tools

Title of tool: **Decision Testing Tool**							
Keywords: Decision; testing; climate; simulation; stakeholder							
Audience: Flood risk assessment expert							
Level of expertise required to use the tool: Expert only							
Messages in the ESPACE strategy where the tool can be applied:	1.	2.X	3.X	4.	5.	6.	7.
	8.	9.	10.	11.	12.	13.	14.X
Sentences linking the tool to relevant strategy messages: 2 The Decision Testing Tool is very effective in looking at testing decisions over the whole life time of a plan. 3 The Decision Testing Tool is central to risk management. 14. The Decision Testing Tool allows plans to be regularly reviewed and revised.							
Overview: In order to test the durability of key decisions, and as partners within the ESPACE project, the Environment Agency led work to develop a Decision Testing Tool. This had two key objectives, • to enable climate change, with its medium and long-term impacts, to be considered alongside the many other drivers affecting planning, and • allow stakeholders to see how well differing approaches to decisions perform given differing climate and related future scenarios.							

Photo/diagram/map:



Description:

The Decision Testing Tool was developed to give planners the confidence to realise that radical decisions may be needed in the short term in order to plan the best long term options given the uncertainty that climate change presents.

The first part of our work was to carry out an investigation of what similar tools were available across Europe to see if any of these were directly applicable or could be adapted. Secondly, tools identified from the first stage were explored through application to the Thames Estuary, England, where accelerated sea level rise presents a number of issues for flood risk management and spatial planning decisions over the century.

During this work, it became clear that what was required was, in fact, two complementary components. First, spatial planners require a framework that can be used to evaluate formally how future climate risks as well as development and environmental change could be managed. This might need to be complex and detailed, and could be confusing for stakeholders. So the second component required was identified as a specific stakeholder engagement tool, which could illustrate the issues of long term decision making. Of course, the link between these two elements is data. Data generated from models during the application of the framework could be used for stakeholder engagement. The overall approach is presented in the diagram below.

A decision making framework had already been developed by the Environment Agency and the UK Climate Impacts Programme, called 'Climate adaptation: Risk, uncertainty and decision-making' and is available from www.ukcip.org.uk. Through the application of this framework to the Thames Estuary pilot, it was clear that two key elements were needed to enhance it. First, was an idea that was developed from 1970s cognitive theory. Cognitive psychologists found that in planning our lives we tend to think of where we are now and where

we want to end up: working as a spatial planner, retiring in Spain, for instance. But what is often missing in our plan is the period beyond 6 months running up to the end, the journey in fact. Similarly, if we are going to plan sustainably to manage climate change into the long term we need to practice the process of planning the whole journey from start through change to some planning horizon with all the stages in between. This we called the decision pathway (see Tools: Decision pipeline tool). The second element missing from the framework was the interaction with stakeholders, something that we wanted to tackle anyway. We decided that the best way to bring these two things together was by using the concept of a game to illustrate the issues. During a game a player may have a set strategy that they may want to follow, but during the game they will be forced to make decisions that will build on each other and will determine whether the player is successful in the end. We felt this was an excellent way of presenting the idea of decision pathways (see Tools: FloodRanger).

We believe that these concepts and approaches have achieved our objectives and provide spatial planners and water managers with new and innovative ways for them to consider climate change along with all the other decisions they have to make.

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