

International Coastal Conference: Partnership Working at the Coast

SUSCOD in Scotland

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and

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Norway

Sweden

Denmark

United Kingdom

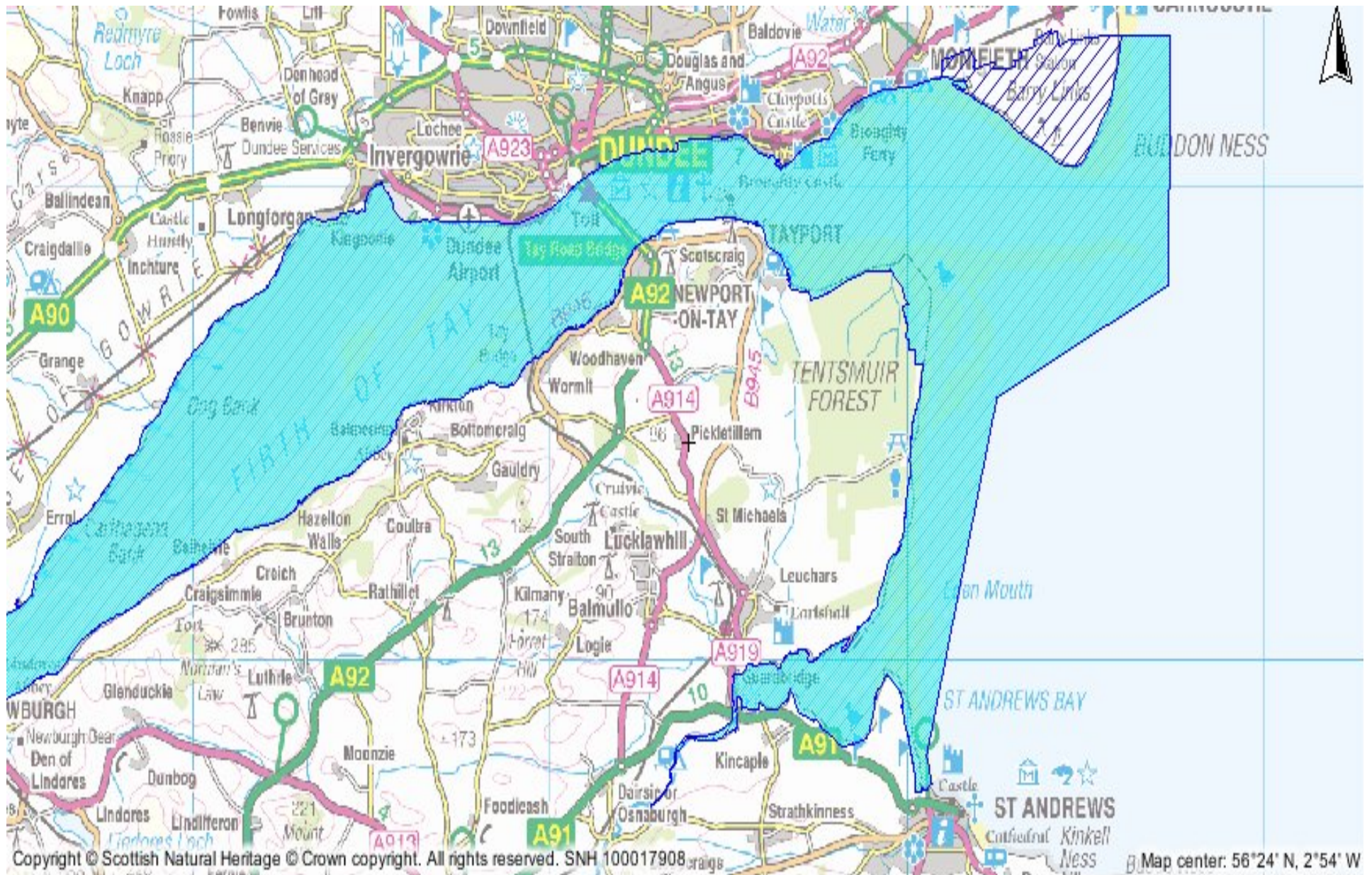
Germany

Netherlands

The Kingdom of Fife: Communities



Pilot Project Area: Firth of Tay and Eden Estuary Natura 2000 and Coastal Zone









Towards an Integrated Approach to Coastal Management

- Coastal erosion and flooding in the pilot area remains a continuing and serious threat to both the natural heritage and to the local and Scottish economy
- All stakeholders in the area called for a fully integrated approach to coastal management, based on the principles and implementation of ICZM

Towards an Integrated Approach to Coastal Management

Objectives include:

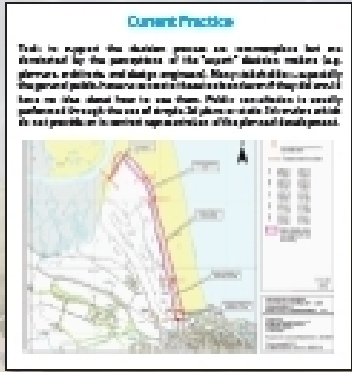
- a long term management plan the West Sands area, St. Andrews
- protection and management of the closed landfill site
- best practice for the design of a managed realignment in the Eden Estuary
- an innovative 3D visualisation of North East Fife

Towards an Integrated Approach to Coastal Management

- Partnership project of Fife Coast and Countryside Trust and University of Abertay
- An interactive 3D simulation and visualisation platform
- Communicates the main features of the site, effects of climate change, and implications for shoreline management
- Effective engagement with stakeholders

FLEX: Fife Landscape Explorer

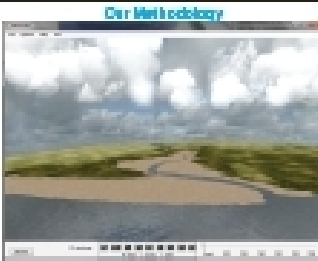
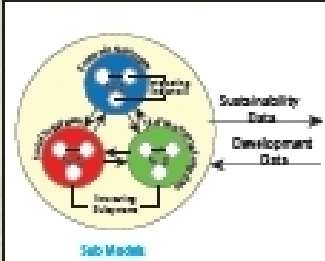
An innovative K2M Tool developed by the University of Abertay Dundee
 In cooperation with Fife Coast and Countryside Trust
 as a component of the SUSCOB Project
www.usocod.eu



- ### Project Aims
- Create a virtual representation that can be used by any stakeholder to explore a development or experience.
 - Enable users to readily experience the consequences of development proposals (at least in some key areas).
 - Allow the investigation of a variety of scenarios with an aim to identify a range of environmental issues that arise in high level consultation with the general public in the planning stage.

Initial Results

The interactive landscape and simulation platform has been used to explore the effects of the implementation of the main features of the site (the physical characteristics, environmental and economic) through the use of virtual design on the planning and technical drawing and process, and the effects of financial management measures (at various stages) regarding the development of the site. The simulation platform will enable the effective engagement of stakeholders during the development of spatial management policies by developing multiple scenarios which can be communicated to stakeholders.



FLEX is essential for these reasons: the only model that illustrates the interdependency between the systems (the ecological system via the K2M methods) and the system policies for the landscape (as based on traditional systems) and the 3D simulation which combines the same data to create a virtual landscape. FLEX is a 3D representation of the real environment. The simulation tool employs a number of techniques to display the sustainability results in the simulation. The creation of a 3D virtual environment allows stakeholders to be immersed in the real environment by applying the sustainability results into a virtual representation of the real environment. FLEX allows the user to investigate and explore the consequences of any planning results, and the differences in quality across the area.

Visual Simulation

The project aims to support spatial management by offering the users an interactive simulation which can be used to explore a range of scenarios (a range of scenarios) in a virtual environment. This allows the user to explore the consequences of the implementation of the main features of the site (the physical characteristics, environmental and economic) through the use of virtual design on the planning and technical drawing and process, and the effects of financial management measures (at various stages) regarding the development of the site. The simulation platform will enable the effective engagement of stakeholders during the development of spatial management policies by developing multiple scenarios which can be communicated to stakeholders.

Currently this type of model is expensive to create and use using any other software tool that is available. It is a complex task to create a virtual environment that can be used to explore a range of scenarios (a range of scenarios) in a virtual environment. This allows the user to explore the consequences of the implementation of the main features of the site (the physical characteristics, environmental and economic) through the use of virtual design on the planning and technical drawing and process, and the effects of financial management measures (at various stages) regarding the development of the site. The simulation platform will enable the effective engagement of stakeholders during the development of spatial management policies by developing multiple scenarios which can be communicated to stakeholders.

Interactive animation of vegetation ecology

FLEX: Fife Landscape Explorer

Over to John