

KEYZONES



# KEYZONES

To Investigate the Sustainable Carrying  
Capacities of Key European Coastal  
Zones

Contract (Framework 6) COOP – CT-2004 -512664

## KEYZONES



- This project deals with the characterisation of the carrying capacity of some key European coastal zones for commercial production of bivalve shellfish.

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- The research was designed to produce powerful tools which would enable shellfish producers in the targeted areas to assess resource capacity, recruitment of young stock, and model the effects of environmental change.

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- The work will also increase the scope and credibility of generic, ecosystem models - with a consequent application to the wider industry and other stakeholders in coastal zones.



## THE PARTNERS

### Small Businesses (SMEs)

North Bay Shellfish Ltd (Scotland, UK), Caledonian Oysters Ltd (Scotland, UK),  
Art Cornelisse (Netherlands, Clew Bay Marine Forum (Ireland)

### Trade Associations

Association of Scottish Shellfish Growers (Scotland, UK), P O Mossel  
(Netherlands), P Oesters (Netherlands), South East Shellfish Co-  
operative (Ireland)

### Specialist Research Providers

Plymouth Marine Laboratory (UK), IMARES (Netherlands), IMAR (Portugal),  
WLDELFT (Netherlands)

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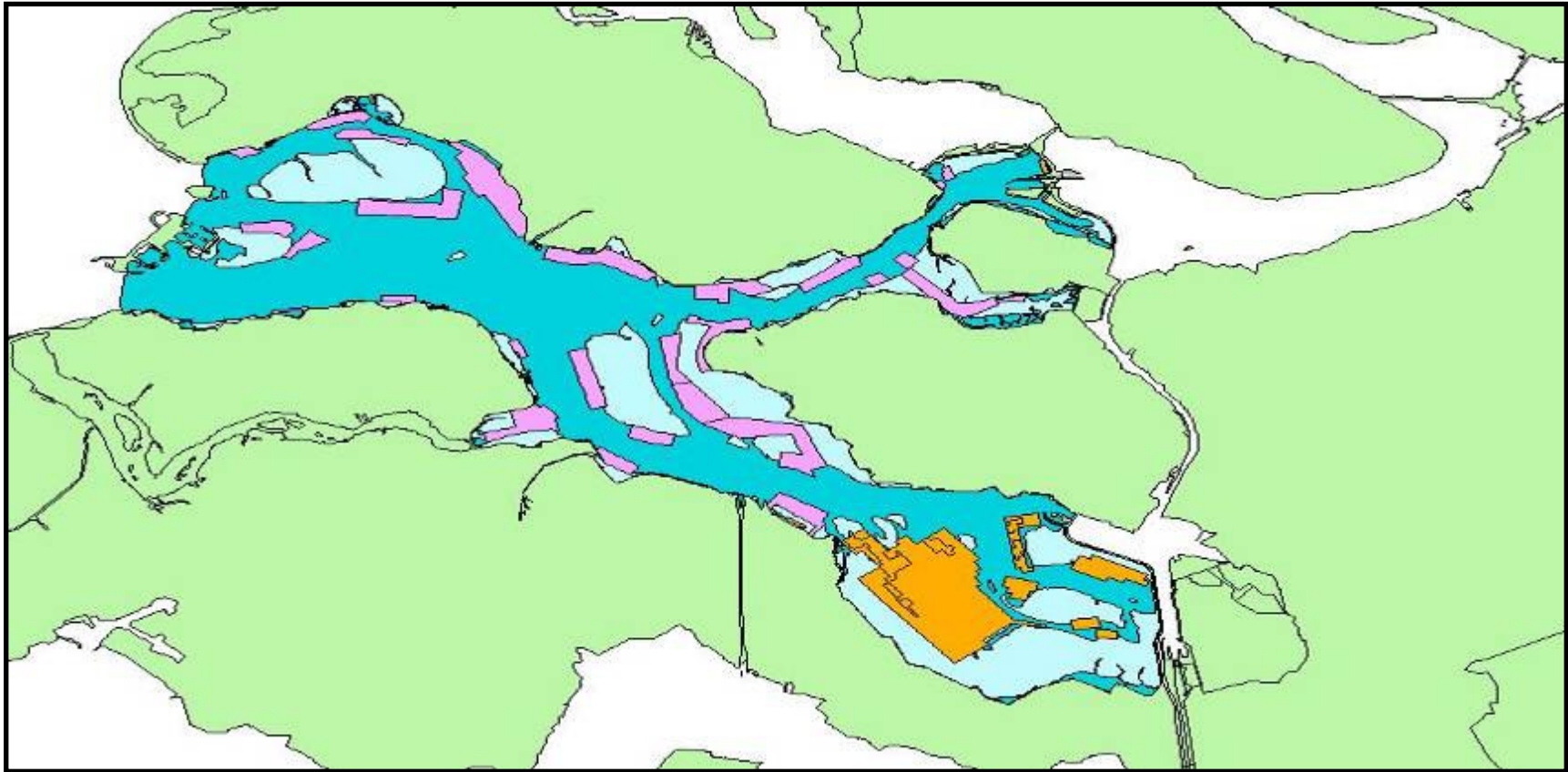
# The Study Areas

# Loch Creran – Scotland



Sample sites (red dots); Aquaculture (rectangles)

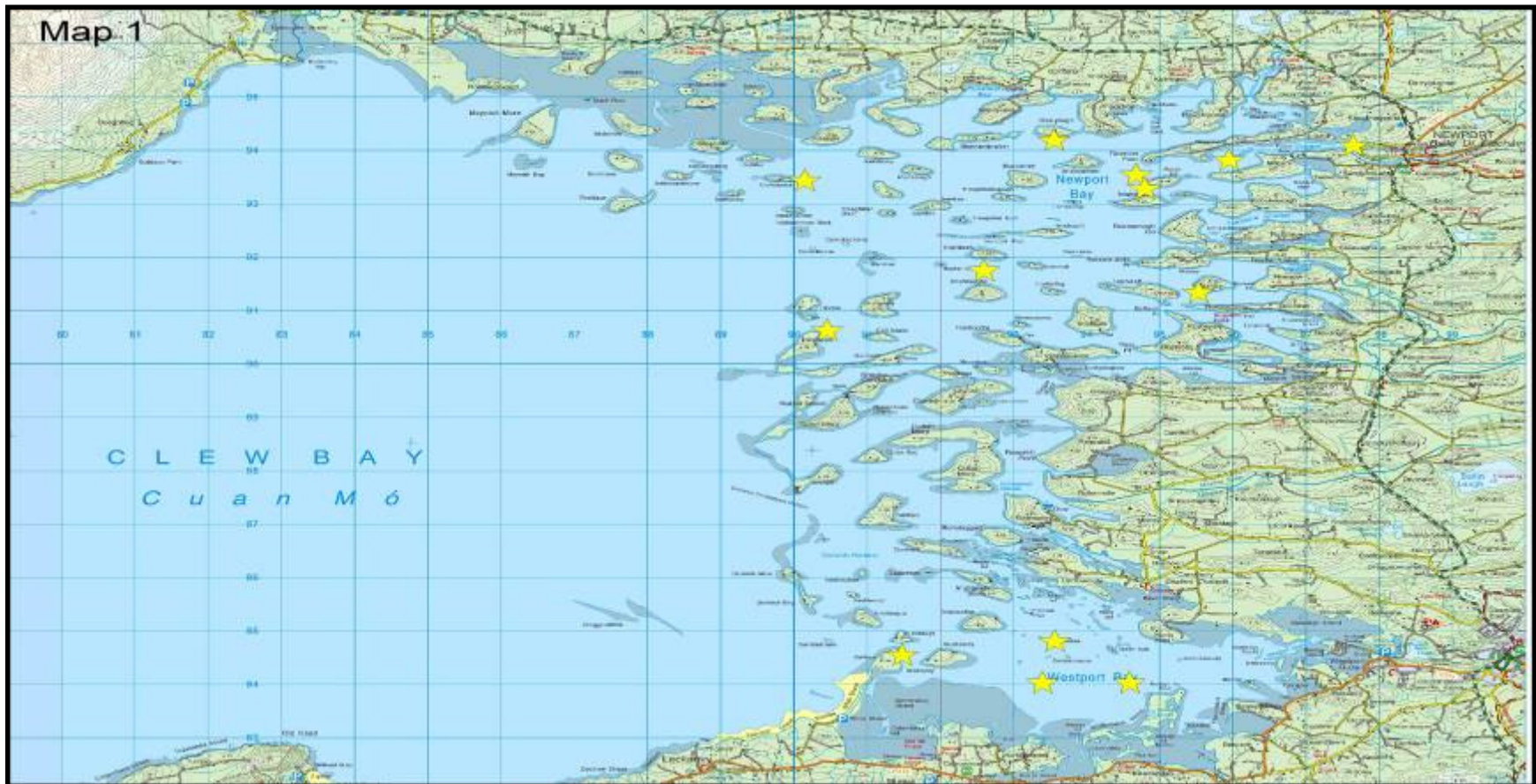
# Oosterschelde - Netherlands



Showing mussel and oyster cultivation areas



# Clew Bay – W Ireland



Showing shellfish cultivation areas (yellow stars)



## RESULTS of the Project (Interim)

- Clew Bay

A model to simulate some farm scale  
outcomes to a range of variables

An example of a wider environmental model

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## RESULTS of the Project (Interim)

- Loch Creran

An ecosystem model to look at the whole system



## RESULTS of the Project (Interim)

- Oosterschelde  
(In progress)

A series of 3 scenarios modelled using a  
coupled hydrodynamic/ecosystem model

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# FINAL GOAL

## SUSTAINABLE AQUACULTURE/FISHERIES

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