Overview of the VALMER scenario process

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Being presented today by
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VALMER

MARINE & COASTAL POLICY WITH PLYMOUTH UNIVERSITY

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What are scenarios?

- A scenario is a **coherent**, **internally consistent** and **plausible** description of a possible future state of the world.
- Scenarios typically contain descriptive storylines together with varying amounts of quantified data.
- A scenario is not a **forecast** – we are not predicting the future or assessing the likelihood of any particular outcome.
- Rather, scenarios portray images of how we use and manage the sea, and how the marine environment **could** look like given different sets of assumptions and conditions (including horizon scanning).
- Our task today will be to develop a series of scenarios and map them.

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Scenarios in VALMER

- VALMER scenarios are being developed together with stakeholders;
- Scenarios are relevant to the specific case study areas and their management;
- Scenarios will be used to explore how the value of ecosystem services arising from the seabed habitat may change; and
- How understanding changes in ecosystem service provision can be used for better sustainable management.

Ecosystem Services ⇨ Nature's Benefits

- Understanding the links between people and the environment
- Communicating the importance of nature

Food, raw materials

Wellbeing, heritage

Reducing harm

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PML | Plymouth Marine Laboratory

Underwater habitats in the Biosphere Reserve

Habitat

Service

Nursery habitat

Food chain

Burial

Benefit

Policy context

- Marine Spatial Planning
- Ecologically coherent network of MPAs (2nd round MCZs)
- Common Fisheries Policy reform
- History of local collaborative measures, FLAG, IFCA, Ray box, Whelk box, Responsible Fishing Scheme, MSC pre-assessment etc....
- Shoreline Management Planning, Catchment Flood Management Plans

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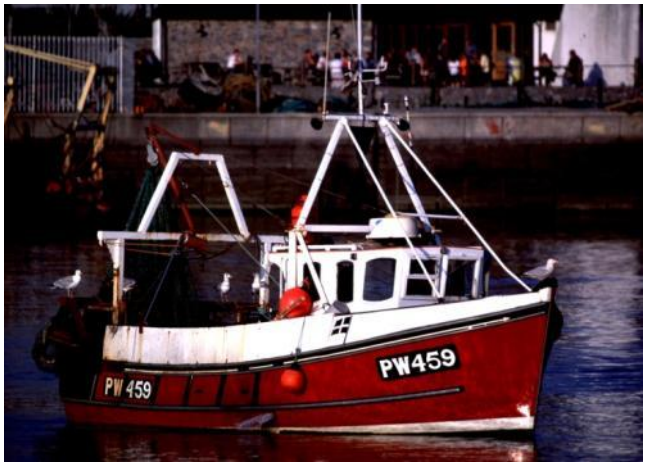
Management Scenarios

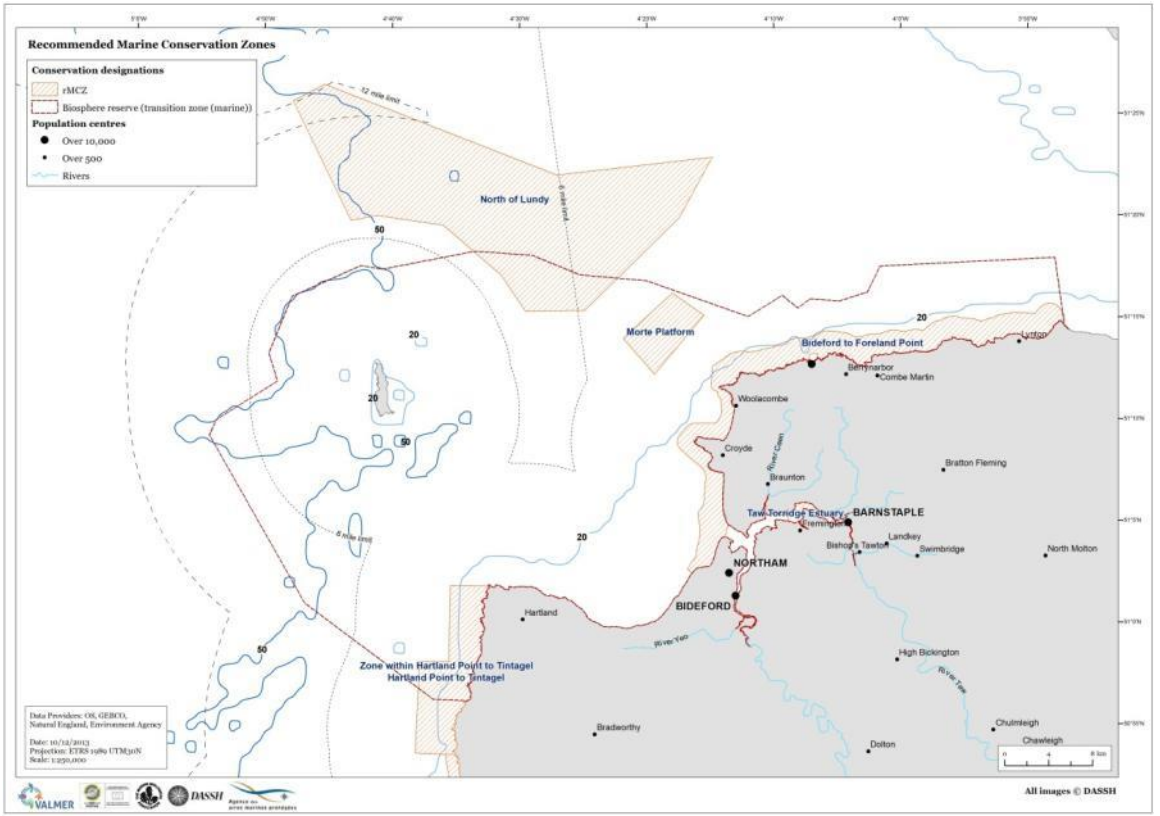
We are interested in human activities that **leave a footprint** on the subtidal sediment habitats.

Scenarios may comprise new management measures for existing activities that affects the intensity or location of them.

For example:

- changes to inshore fisheries management
- designation of rMCZs



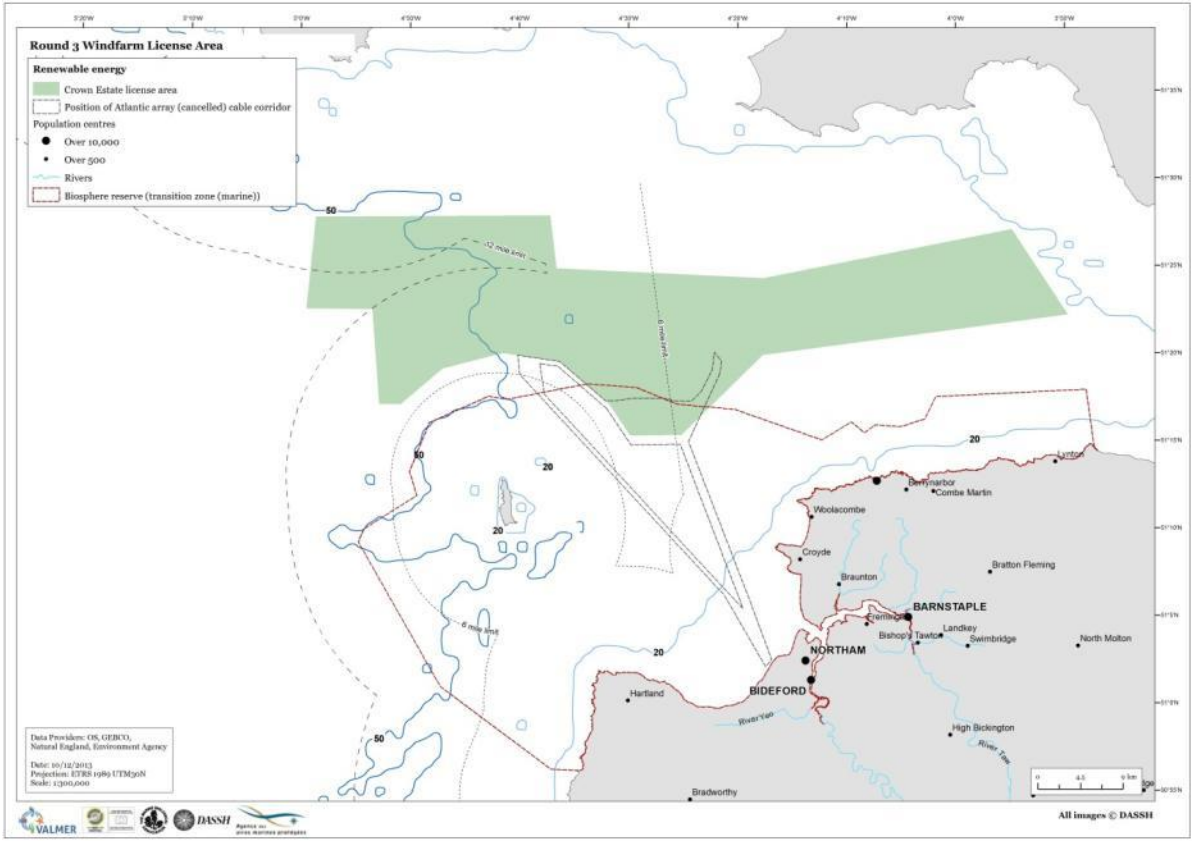


Management Scenarios

Alternatively scenarios may comprise new activities such as:

- Cable laying
- Renewables installations
- Port expansion
- Aggregate dredging

Or combinations of both new activities and new management



Scenario development

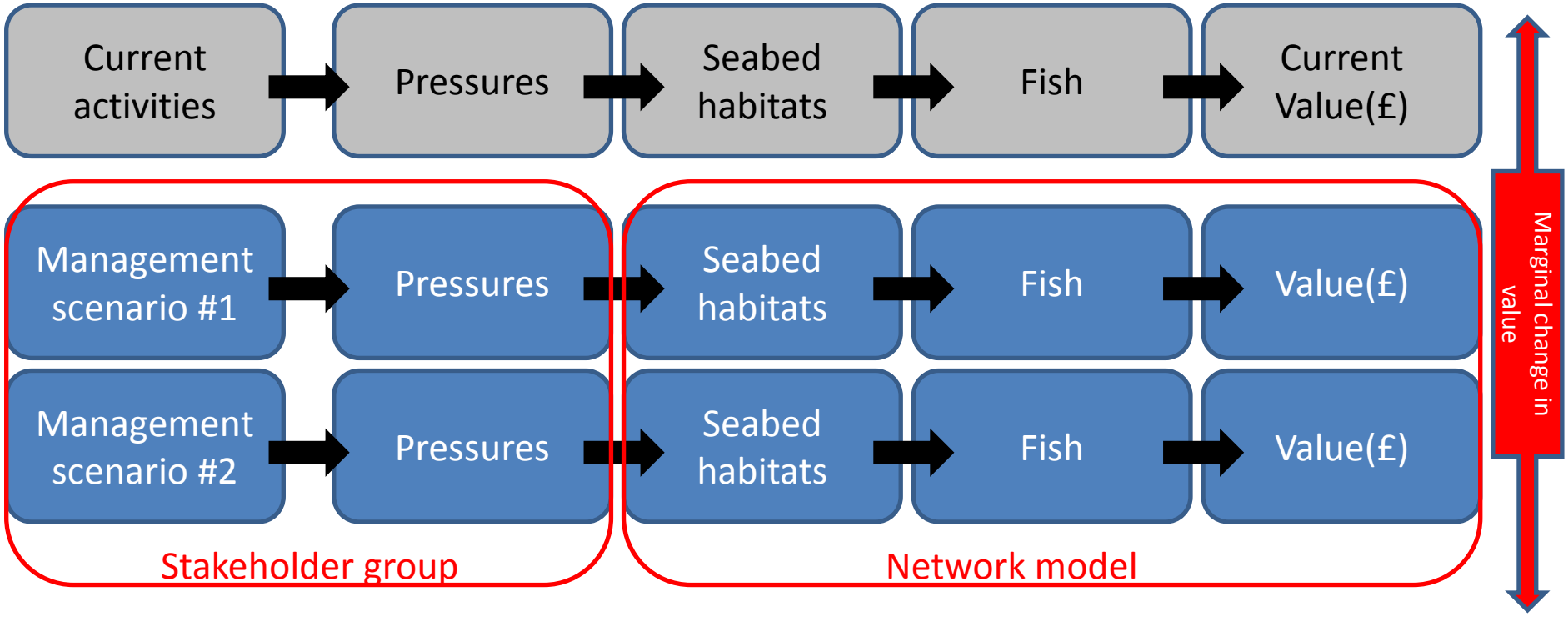
Each scenario will have:

- a **name** and brief description
- a **storyline** describing what this means in terms of activities in the case study area. This would include whether the scenario is driven by policy, industry sectors or lifestyle changes. For each activity affected, the change would be identified in terms of location and intensity of that activity (including new activities)
- A series of associated **activity maps** that show changes in the activities in terms of intensity and location

This will be presented in detail after coffee

How these scenarios will be used

- Activity maps will be used as input to a network model to work out what effect these changes would have on the value of the seabed habitat in terms of supporting fisheries production (and possibly carbon sequestration and waste remediation).



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