



PLANNING FOR THE FIRTH OF CLYDE

C-SCOPE Conference, Weymouth
19th October 2009

Kate Thompson
SSMEI Clyde Pilot

OUTLINE & ACKNOWLEDGEMENT

SSMEI and the Pilot Projects

Firth of Clyde Pilot

Firth of Clyde MSP

Planning Process

SECTORAL INTERACTIONS STUDY

Lessons Learned

Thanks John!



SCOTTISH SUSTAINABLE MARINE ENVIRONMENT INITIATIVE



Begun by Scottish Executive in 2002, continued by Scottish Government from May 2007

“To develop and test the effectiveness of alternative management approaches to deliver sustainable development in Scotland's coastal and marine environment”

National Steering Group of stakeholders and regulators

Currently in third phase: pilot projects

Outputs now informing thinking on how regional MSPs might be developed under a Marine (Scotland) Act.

Marine (Scotland) Bill

1. Marine planning

2. Marine licensing

3. Marine conservation

4. Seal conservation

5. Enforcement

Introduced to Scottish Parliament
29th April 2009

At end of Stage 1 - Rural Affairs
& Environment Committee
consideration of evidence

Consideration of amendments to
begin in November

Royal Assent anticipated early 2010

Initial planning function will be development of a National Marine Plan for Scotland. SSMEI outputs informing thinking on how Regional Marine Plans might then be developed.

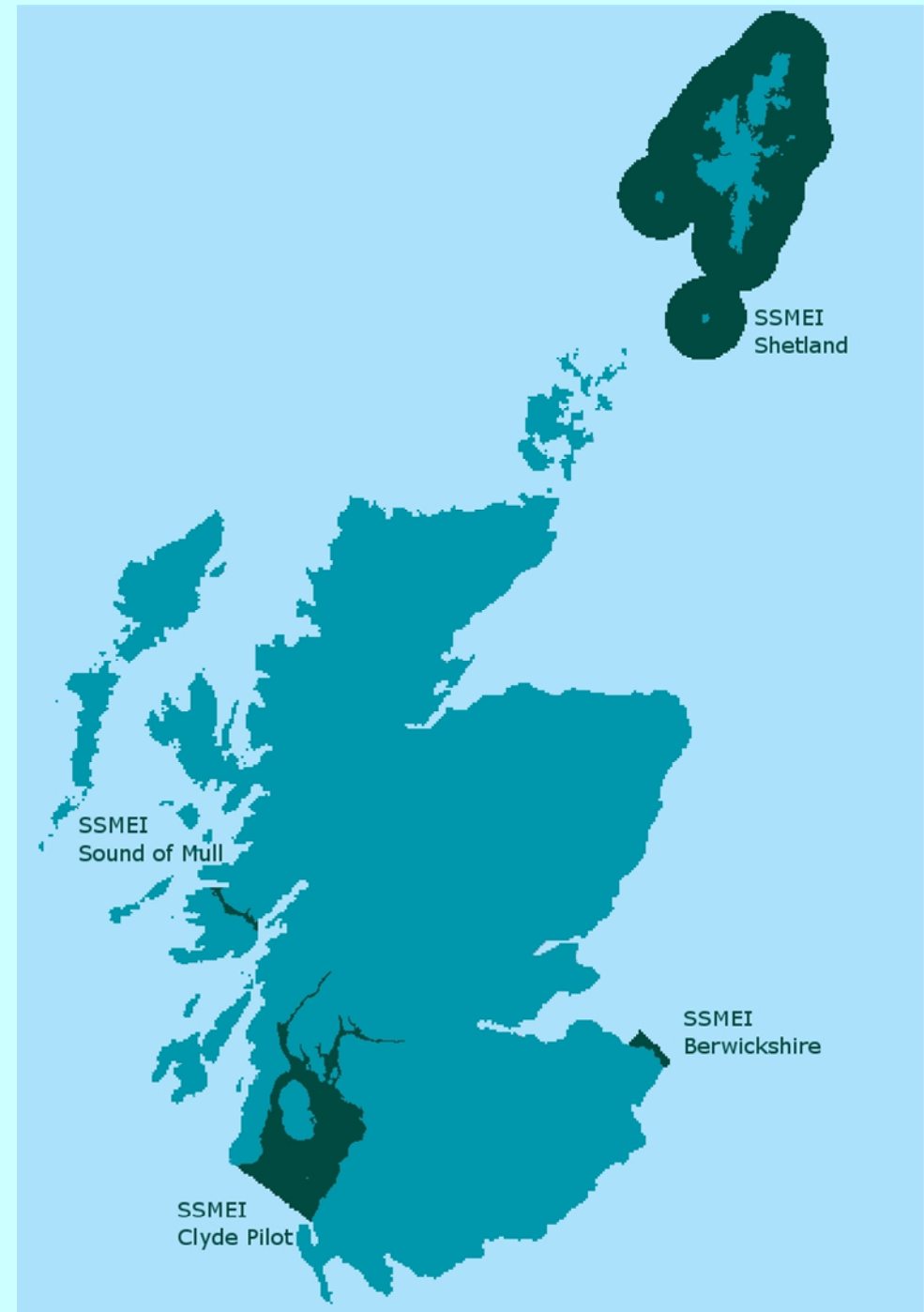
SSMEI PILOT PROJECTS

- Shetland
- Firth of Clyde
- Sound of Mull

Marine Spatial Planning at various scales in diverse areas

- Berwickshire

Local community engagement and participation in marine management



FIRTH OF CLYDE PILOT

Started July 2006

Tasked with development and implementation of a voluntary

“MSP for natural resource use, development control and management”

- ecosystem based approach to sustainable development
- integration of forward plans for key sectors
- delivered through stakeholder - regulator partnership.



*1,000km coastline, 3,650km² sea area
Coastal population 387,300 (2001)*

SSMEI CLYDE PILOT STEERING GROUP

Based on Core Group of the Firth of Clyde Forum – a long established ICZM partnership

- Argyll & Bute Council
- Ayrshire Joint Planning Steering Group
- British Marine Industries Federation, Scotland
- Caledonian Maritime Assets Limited
- CalMac Ferries Ltd
- Clyde Fisheries Development Project
- Clyde Fisherman's Association
- Clydeport Harbour Master
- Clydeport Operations Limited
- Firth of Clyde Forum
- FRS Marine Laboratory (Marine Scotland)
- Glasgow and the Clyde Valley Strategic Development Planning Authority
- Glasgow City Council
- Historic Scotland
- HMNB Clyde
- Lighthouse Caledonia Ltd
- Queen's Harbour Master Clyde
- Royal Society for the Protection of Birds
- Royal Yachting Association Scotland
- Scottish Coastal Forum
- Scottish Creelers and Divers (SCAD)
- Scottish Enterprise
- Scottish Government Marine Management Division (Marine Scotland)
- Scottish Environment Protection Agency
- Scottish Natural Heritage
- Strathclyde Passenger Transport
- The Crown Estate
- University Marine Biological Station

DRAFT FIRTH OF CLYDE MSP



Launched end March 2009

Public consultation on Plan and
SEA Environment Report April,
May and June 2009

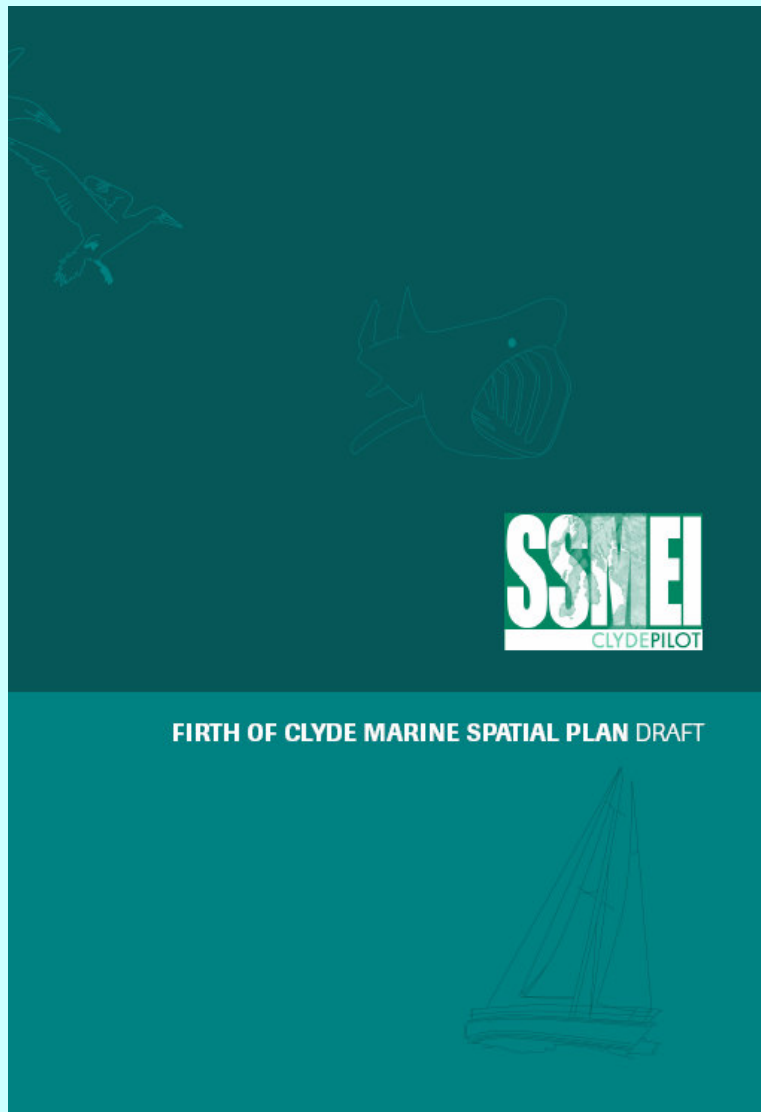
Outcome informing revised Plan to
be published spring 2010

Plan and associated documents
available at

www.clydeforum.com/ssmei



FIRTH OF CLYDE MSP CONTENTS



Background and Context

The Framework

Crosscutting Policy Themes

Sectoral Plans

Implementation and Monitoring



Background and Context

The Framework

Crosscutting Policy Themes

Sectoral Plans

Implementation and Monitoring

Environment

Communities

Heritage

Safety

Background and Context

The Framework

Crosscutting Policy Themes

Sectoral Plans

Implementation and Monitoring

Recreation and Tourism

Shipping and Transport

Mariculture

Fishing

Energy and Subsea Infrastructure

Background and Context

The Framework

Crosscutting Policy Themes

Sectoral Plans

Implementation and Monitoring

EVIDENCE AND DATA GATHERING:

to characterise the area; describe current activities and associated infrastructure; identify issues and potential conflicts; look forward

Policy Mapping

Existing GIS layers

State of the Clyde Report

Landscape/Seascape Assessment

Socioeconomic review

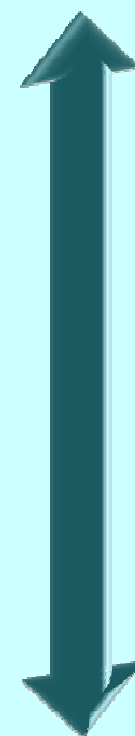
Indicative Seabed Habitat Map

Review of Biodiversity

Sectoral Workshops

SECTORAL INTERACTIONS

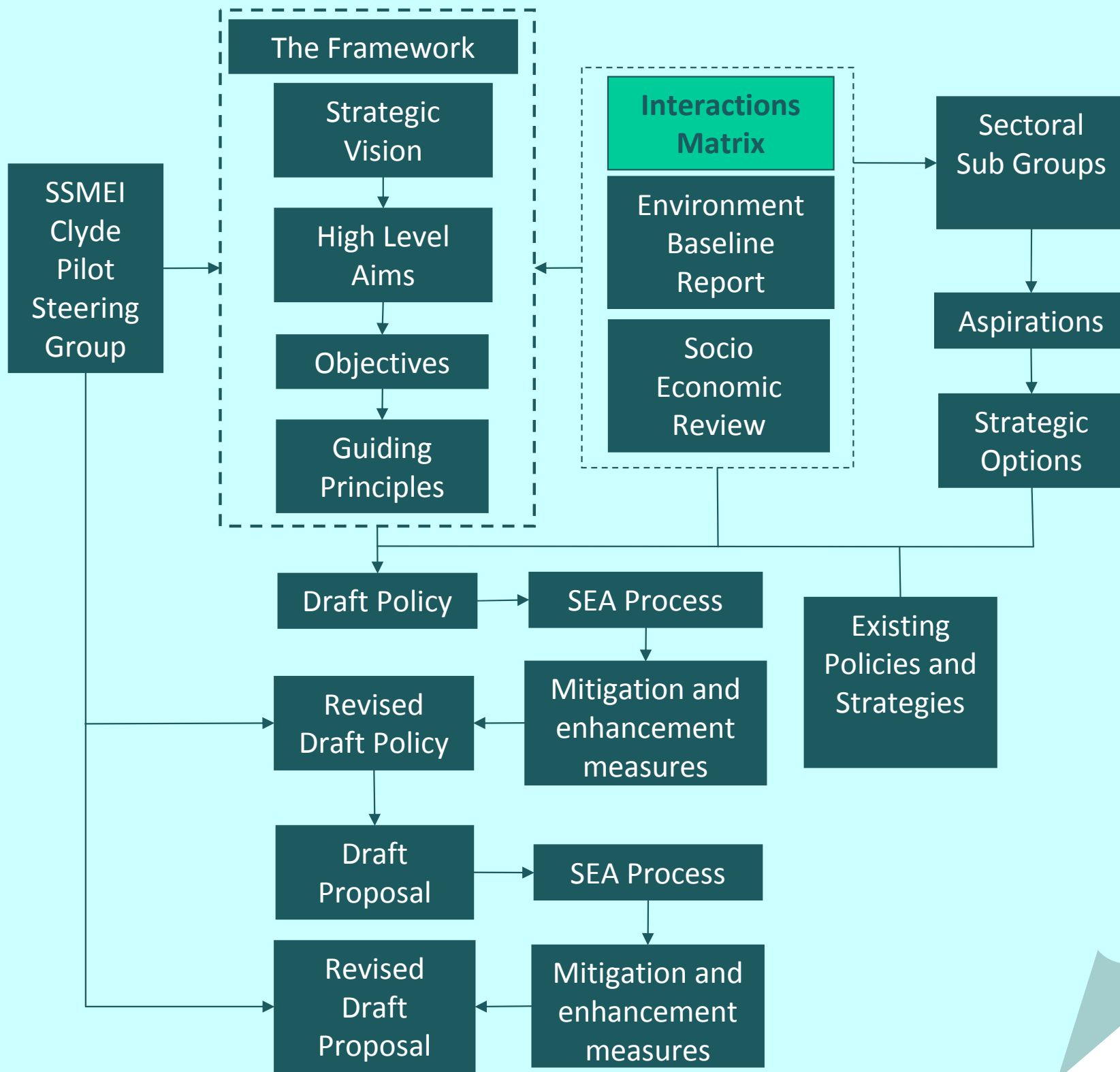
(Relatively) straightforward
information/data compilation



Manipulation and
analysis of (multiple)
existing data sets

Collection and analysis of
new data

Plan Development Process 2



SECTORAL INTERACTIONS STUDY

Why?

How?

Some Key Findings

Application within MSP

	Energy	Fishing	Mariculture	Recreation & Tourism	Shipping & Transport	Other
Shipping & Transport	Navigation	Navigation & Safety	Safety (access to sheltered waters) Pollution	Navigation & Safety Resource competition (berthing space)	Navigation & Safety	Navigation & Safety (naval craft)
	Infra-structure	Safety (wash) Infra-structure		Safety (wash) Resource damage (dredging) Safety (jet skis)		Navigation (coastal lighting) Equip. damage & Safety (marine litter)
Relevant Policies	S&T1 S&T4 ESC&P3	FISH1 FISH2	ENV7 S&T6 S&T7 MAR1 MAR2	S1 R&T6 S&T7		ENV10 S1

WHY?



Chris Waltho



<http://www.flickr.com/photos/stefrobb/>



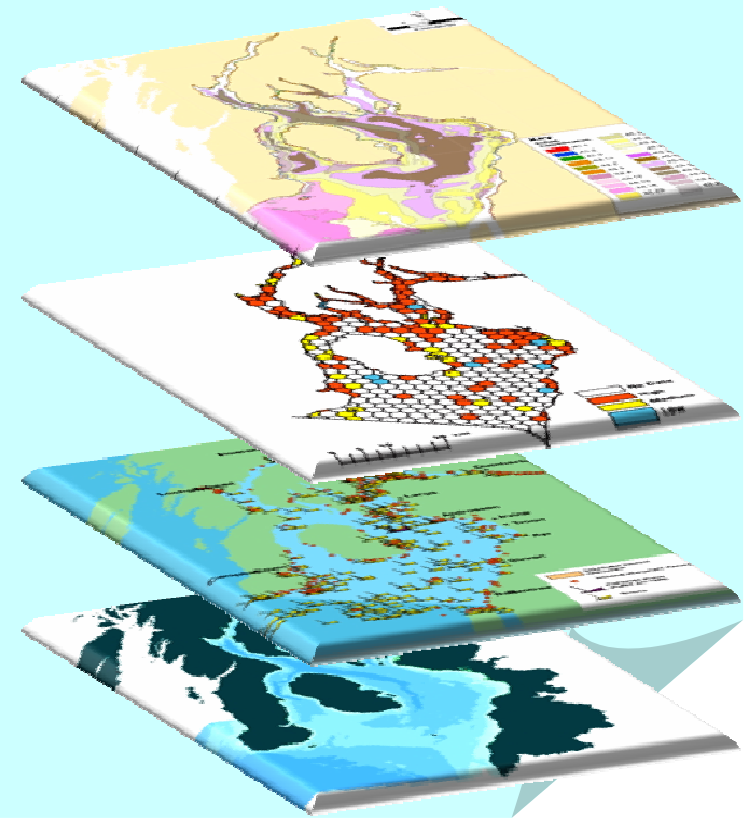
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FOCUS

Understanding the *perceptions* of (sub)sectors in the Firth of Clyde of the *nature* of their interactions

Directed at umbrella bodies (e.g. business federations, sports associations), rather than individual businesses, sports clubs etc.

Distinct from, but complementary to, GIS-based analysis of sector-specific constraints.



HOW?: OVERALL APPROACH

Matrix-based

		Aquaculture			
		Onshore finfish	Offshore finfish	Shellfish	Processing
Renewable Energy	Offshore Wind	Neutral	Positive	Neutral	Neutral
	Wave	Neutral	Positive	Neutral	Neutral
	Tidal	Neutral	Positive	Neutral	Neutral
Subsea cables and pipelines	Electricity	Neutral	Neutral	Neutral	Neutral
	Oil/Gas Pipelines	Conflict	Conflict	Neutral	Neutral
	Telecomms	Neutral	Neutral	Neutral	Neutral
Inshore fisheries	Nephrops trawl	Neutral	Conflict	Competition	Neutral
	Scallop dredge	Neutral	Conflict	Conflict	Neutral
	Demersal trawl	Neutral	Conflict	Competition	Neutral
	Pelagic trawl	Neutral	Conflict	Neutral	Neutral
	Longline	Neutral	Conflict	Neutral	Neutral
	Creel	Neutral	Conflict	Neutral	Neutral
	Dive	Neutral	Conflict	Competition	Neutral
	Processing	Neutral	Neutral	Neutral	Neutral
Aquaculture	Onshore finfish		Positive	Neutral	Positive
	Offshore finfish	Positive		Competition	Positive
	Shellfish	Positive	Positive		Positive
	Processing	Positive	Positive	Neutral	
Shipping and transport	Tankers	Neutral	Conflict	Conflict	Neutral
	Bulk carriers	Neutral	Conflict	Neutral	Neutral
	Container vessels	Neutral	Conflict	Neutral	Neutral
	Coastal bulk cargo	Neutral	Positive	Neutral	Neutral
	Ferries	Neutral	Conflict	Neutral	Neutral
	Cruise ships	Neutral	Conflict	Neutral	Neutral

Allowed two-way data presentation across over 70 subsectors/activities in visual format

Easy and efficient data collection – blank matrices developed as Excel worksheets and distributed by e-mail.

LIMITATIONS

- basic matrix data cannot in themselves indicate the intensity or ubiquity of interactions within the Firth of Clyde.
- “one size fits all” categorisation of interactions may not capture real life complexities

Follow-up meetings enabled exploration of such complexities and their implications for marine management within the Firth of Clyde

BLANK MATRIX

Microsoft Excel - Appendix 3 for PRINTING (3 worksheets)

File Edit View Insert Format Tools Data Window Help

Type a question for help

Arial 12 B I U

60%

	A	B	C	D	E	F	G	H	I	J	K		
	YOUR SECTOR			YOUR SECTOR AND SUBSECTORS									
1	<div> <div>OTHER SECTORS</div> <div> <div>Renewable Energy</div> <div>Offshore Wind</div> <div>Wave</div> <div>Tidal</div> <div>Subsea cables and pipelines</div> <div>Electricity</div> <div>Oil/Gas Pipelines</div> <div>Telecomms</div> <div>Inshore fisheries</div> <div>Nephrops trawl</div> <div>Scallop dredge</div> <div>Demersal trawl</div> <div>Pelagic trawl</div> </div> </div>			Historic and Cultural Heritage Management		Additional Comments and Information							
2				Management of coastal monuments and archaeology		Management of marine monuments and archaeology		Other		any interactions as other than "neutral" in the matrix . Please also give more details on the nature, significance to your (sub)sector, timing (e.g. gear round, summer only) and spatial extent (e.g. whole of Firth, Ardsrossan Bay) of the interaction(s).			
3													
4													
5													
6													
7													
8													
9													
10													
11													
12													
13													

Neutral	Where the activity of the other (sub) sector has no positive or negative influence on your (sub)sector
Competition	Where there is sustainable competition for access to the same resources or areas between the other (sub) sector and your (sub)sector
Conflict	Where conflict arises as a consequence of unmanaged competition between the other (sub) sector and your (sub)sector
Incompatible	Where there is a fundamental and unmanageable incompatibility between the activity of the other (sub) sector and your (sub)sector
Positive	Where the activity of the other (sub) sector has a positive influence on your (sub)sector

Instructions Your Details His

Ready

start FILES TO PRINT

SURVEY INSTRUCTIONS

YOUR SECTOR		YOUR SECTOR AND SUBSECTORS			
		Renewable Energy			
OTHER SECTORS	Renewable Energy	Offshore Wind	Wave	Tidal	Other
	Offshore Wind				
	Wave				
	Tidal				
	Subsea cables and pipelines	Electricity			
OTHER	Oil/Gas Pipelines				

STEP 2a

Decide which subsector(s) you are able to represent (either alone or in consultation with others).

STEP 2b

Identify any additional subsectors/facets for your sector/industry not already listed in the sheet which you feel should be included and enter these in the heading for the column currently named "Other".

STEP 3

Work down the column(s) for each of your chosen subsectors. Each cell represents the interaction between the subsector named in the row and that in your chosen column, as shown in the example to the left.

Select each cell in turn to reveal the drop down menu button at the bottom right of the cell. There are 73 cells in each column - please ensure that you scroll down to the end of the document when completing the matrix..

Left click on the button to bring up the menu and then click again on **the option that best characterises the nature of the impact of the given subsector on your chosen subsector** - the cell will automatically fill with you selected option. If you wish to change your selection, simply highlight the cell, click *Delete* to remove the text and then pull up the cell menu again.

Renewable Energy			
Offshore Wind	Wave	Tidal	Other

This cell represents interaction between subsea pipelines and the harnessing of wave power

The table below gives full definitions of the menu

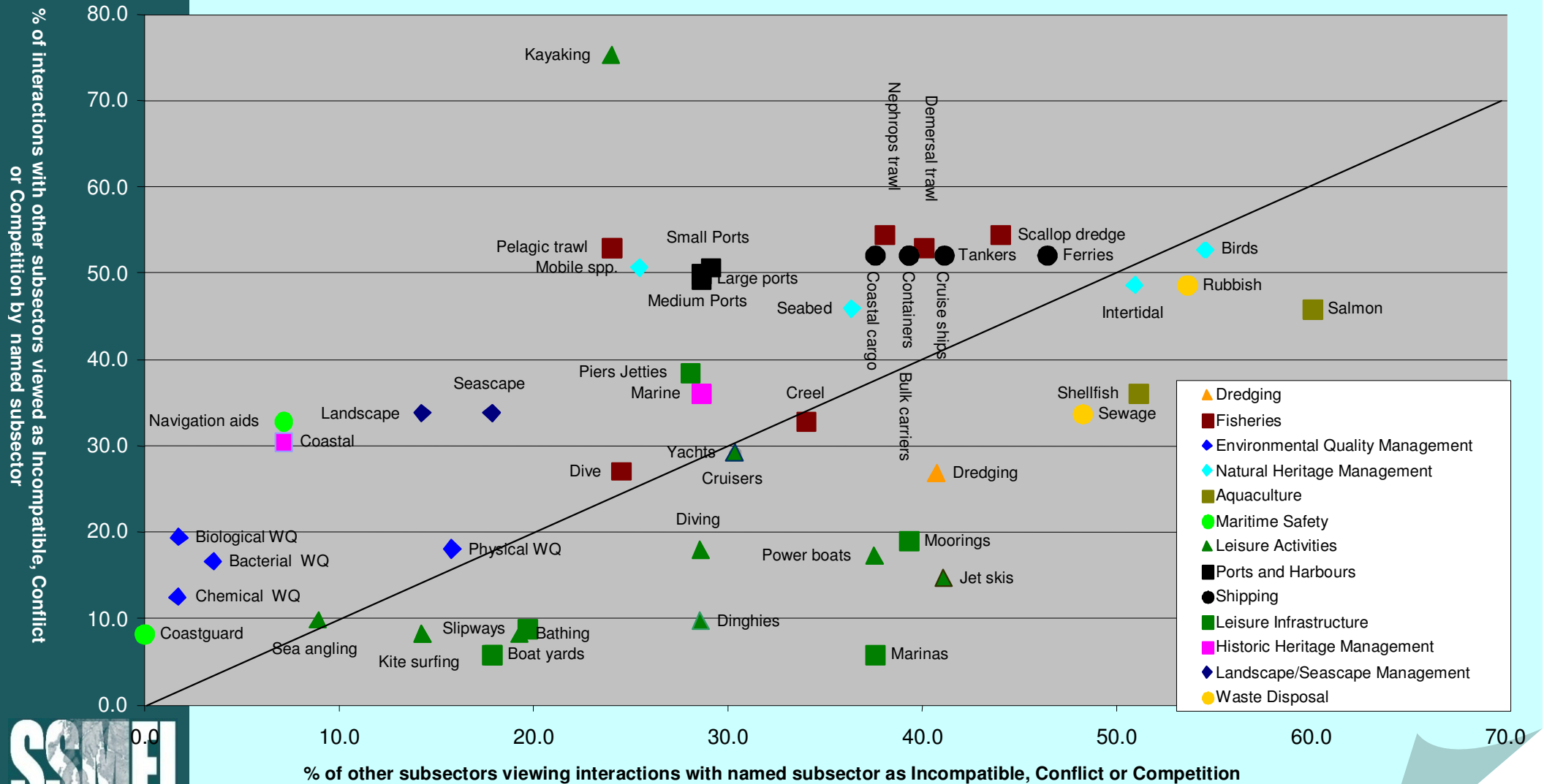
RESULTS: Interactions Matrix

[illegible]

RESULTS: Interactions Matrix

- Over 4000 data points from 26 (out of 34) questionnaires completed
- 53% of interactions perceived as neutral
- 14% as positive/synergistic
- 9% as (unmanaged) conflict or incompatible
- 24% as (potentially managed) competition

ANALYSIS



SOME KEY FINDINGS

- Many fewer unmanaged conflicts than might be anticipated given the range and level of activities present in the Clyde
- Vast majority of potential conflicts perceived as being subject to management through a range of (inter) national statutory instruments and/or local management mechanisms
- However, these do not guarantee that potential conflicts are resolved to the satisfaction of stakeholders
- There may be considerable disparities between how (sub)sectors perceive themselves and are perceived by others

SOURCES OF POTENTIAL CONFLICTS

Competition for use of marine space

- Use of same areas of sea (bed)
- Navigation issues
- Access issues: especially between shore and sea

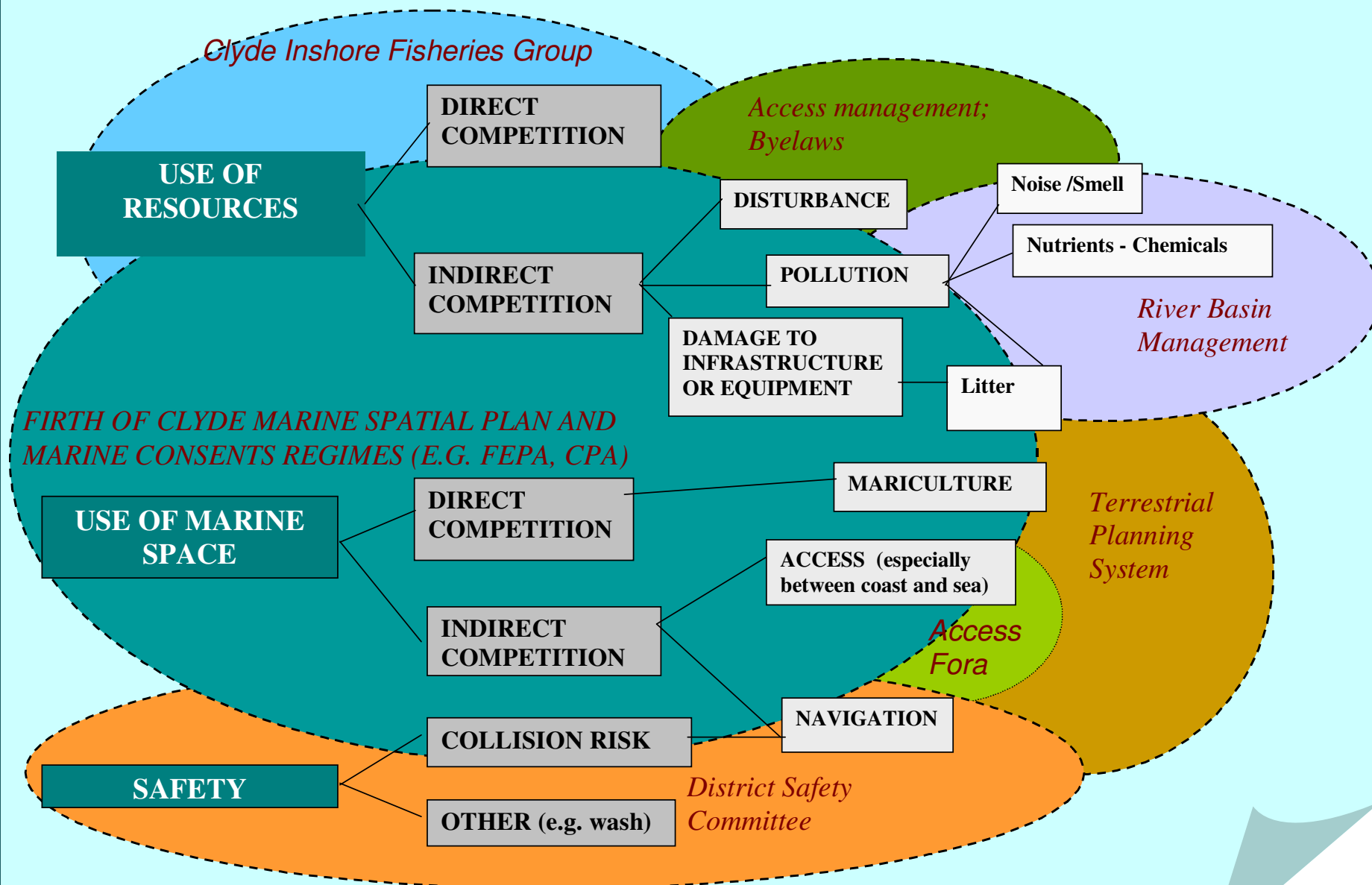
Safety

- General e.g. wash
- Risk of collision between vessels

Use of and impacts on resources

- Direct: targeting same resources
- Indirect: activity of one (sub)sector potentially detrimental to resources utilised or safeguarded by another e.g. through pollution or disturbance

POTENTIAL ROLE OF MSP

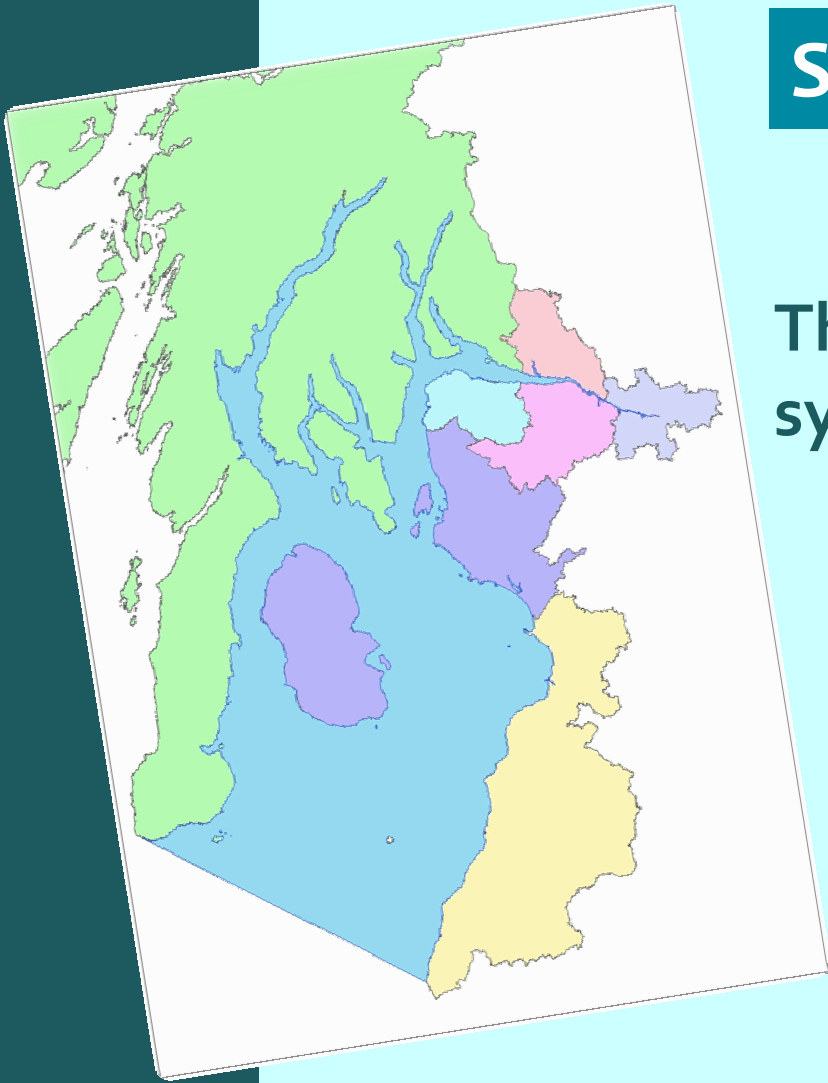


APPLICATION WITHIN CLYDE PLAN

	Energy	Fishing	Mariculture	Recreation & Tourism	Shipping & Transport	Other
Shipping & Transport	Navigation	Navigation & Safety	Safety (access to sheltered waters) Pollution	Navigation & Safety Resource competition (berthing space)	Navigation & Safety	Navigation & Safety (naval craft)
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SOME LESSONS LEARNED: 1

There is a need for a co-ordinated system of marine planning



The interface between marine and terrestrial planning and management systems is critically important.



SOME LESSONS LEARNED: 2

Data gaps may present considerable challenges to MSP and delivery of an ecosystem-based approach

Management Scales

- ✓ Strategic approach at level of whole Firth with policies reviewed at 5-year intervals in support of a 20-year vision
- ? Local delivery dependent upon (voluntary) buy-in by multiple stakeholders

Sustainability and Adaptive Management

- ✓ Extensive data collation on economic, environmental and social aspects
- ✓ Environment recognised as cross-cutting theme and SEA applied to Plan development
- ? Adaptive management dependent upon resources to inform periodic Plan review

Ecosystem Approach

Stakeholder Involvement and Intersectoral Co-operation

- ✓ Extensive stakeholder involvement and consultation in preparation of Plan
- ? Delivery depends on willingness of sectors to participate in novel decision-making and delivery mechanisms proposed by Plan

Safeguard of Ecosystem Services

- ✓ Environment recognised as cross cutting theme and SEA applied to Plan development
- ✓ Progress made in identifying and addressing data gaps, BUT
- X Current understanding of ecosystem functions and processes within marine environment of Firth

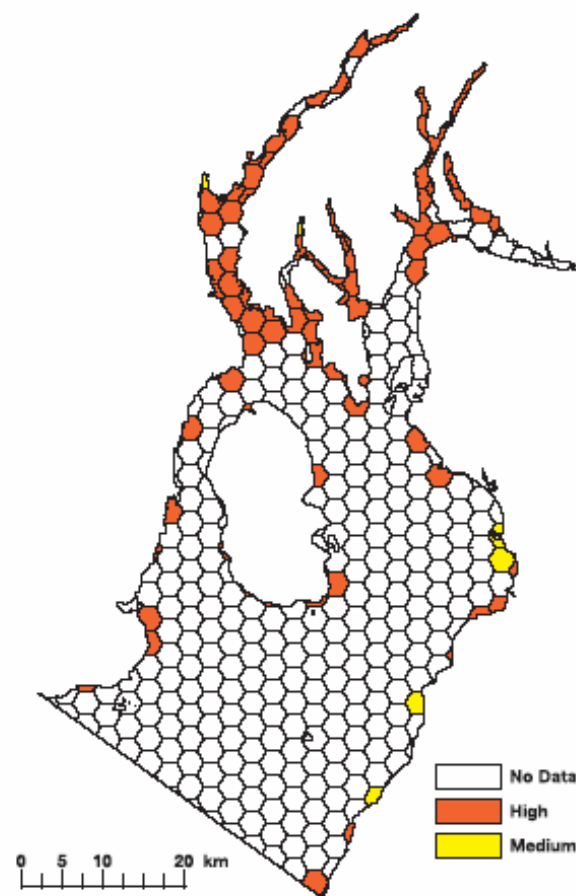


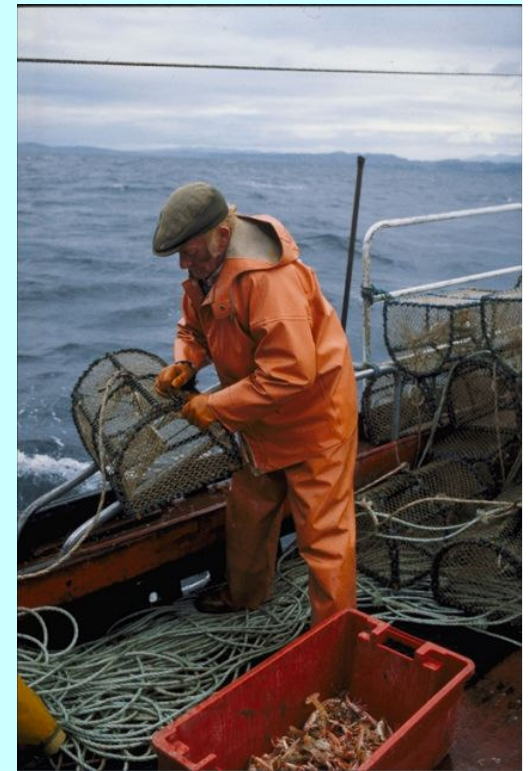
Diagram 8. The spatial distribution of data by quality across the Firth of Clyde for habitat sample data.

SOME LESSONS LEARNED: 3



Stakeholder engagement is vital, but is challenging at a community level, particularly with respect to strategic national or regional plans

20,000 leaflets to 370 locations, 9 information events, 14 responses from members of the public and 5 from community groups



SOME LESSONS LEARNED: 4

Marine (Spatial) Planning is a very valuable tool, but marine planners can only work within wider policy and regulatory contexts

There is a need for streamlining of consents processes and for clarity with respect to priorities for safeguard of marine biodiversity

Marine Wind Farm

Section 36 consent under the 1989 Electricity Act

EIA under Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2000 (SSI 2000/320)

FEPA

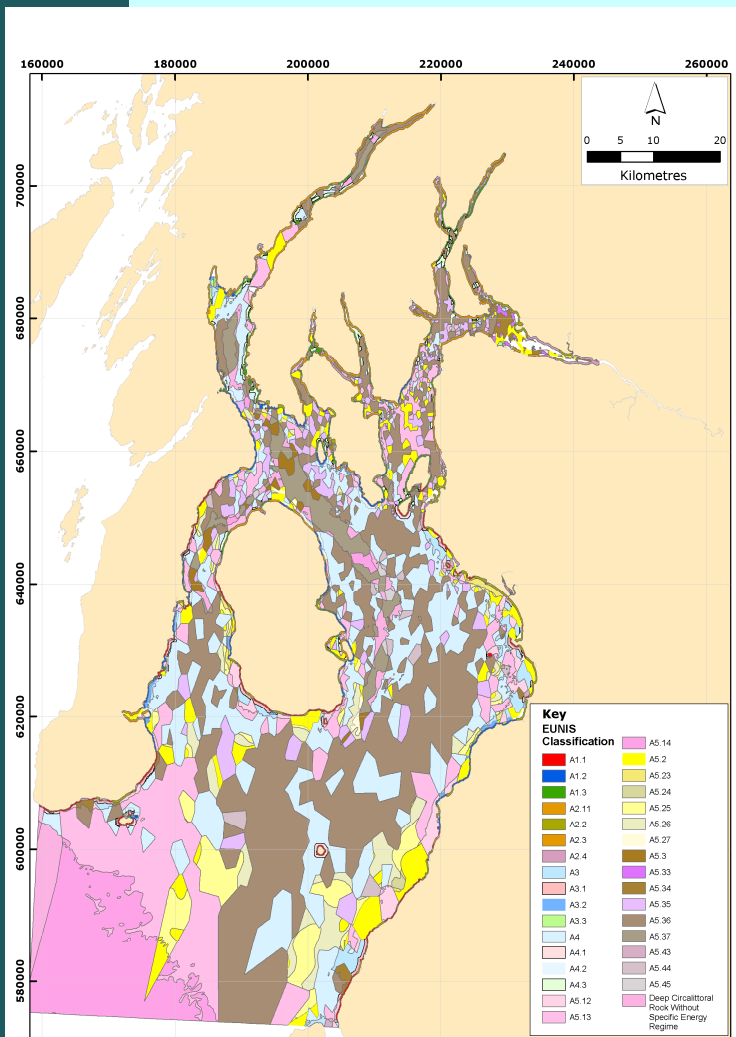
Crown Estate License

Section 34 of the 1949 Coast Protection Act



CONCLUSIONS

The MSP processes of data collation and stakeholder engagement are in themselves potentially beneficial to regulators, developers and other stakeholders.



To maximise such potential benefits, and assist conflict resolution, Marine (Spatial) Planning should be statutory and underpin the delivery of consenting procedures in the marine environment.

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