

Dr. Carolyn Heeps

Environmental Policy Manager

Marine Estates

www.crownestate.co.uk



Offshore Windfarms

Round 1 REVIEW
Round 2 TENDER

Other “wet”
renewables



ROUND ONE MILESTONES

- Pre-qualification process 2001
- Procedures: financial, offshore development and wind turbine expertise
- Financial refundable deposit £300K
- 18 developers and 13 locations
- N Ireland and a co-generation project
- Agreement for Lease leading to 22 year Lease
- A demonstration round



Progress to date

- 12 sites fully consented
- 1 project constructed – North Hoyle
- 1 project in construction – Scroby Sands
- 3 more this year?
- Why the delay?



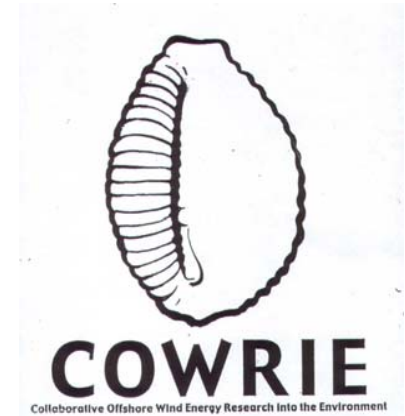
COWRIE Steering Group

“to bring together expertise to identify and prioritise generic studies necessary to ensure that the offshore wind industry is developed in an environmentally acceptable way.”



Priority Generic Issues

- Impacts on birds
- Potential impact of electromagnetic fields on fish
- Impacts of noise and Vibration on marine life



ELECTROMAGNETIC FIELDS

- Stage 1 Report on website

DISPLACEMENT OF COMMON SCOTER

- Surveys and modelling

BIRD SURVEY METHODOLOGY

- Workshop November 2003 and report

UNDERWATER ACOUSTICS

- Site measurements at
North Hoyle, Blyth,
Scroby Sands



Round 2

- **DTI**

White Paper

Policy context - 10% by 2010

Strategic Environmental Assessment

Energy Bill

- **THE CROWN ESTATE**

Competitive Tender

Leasing arrangements



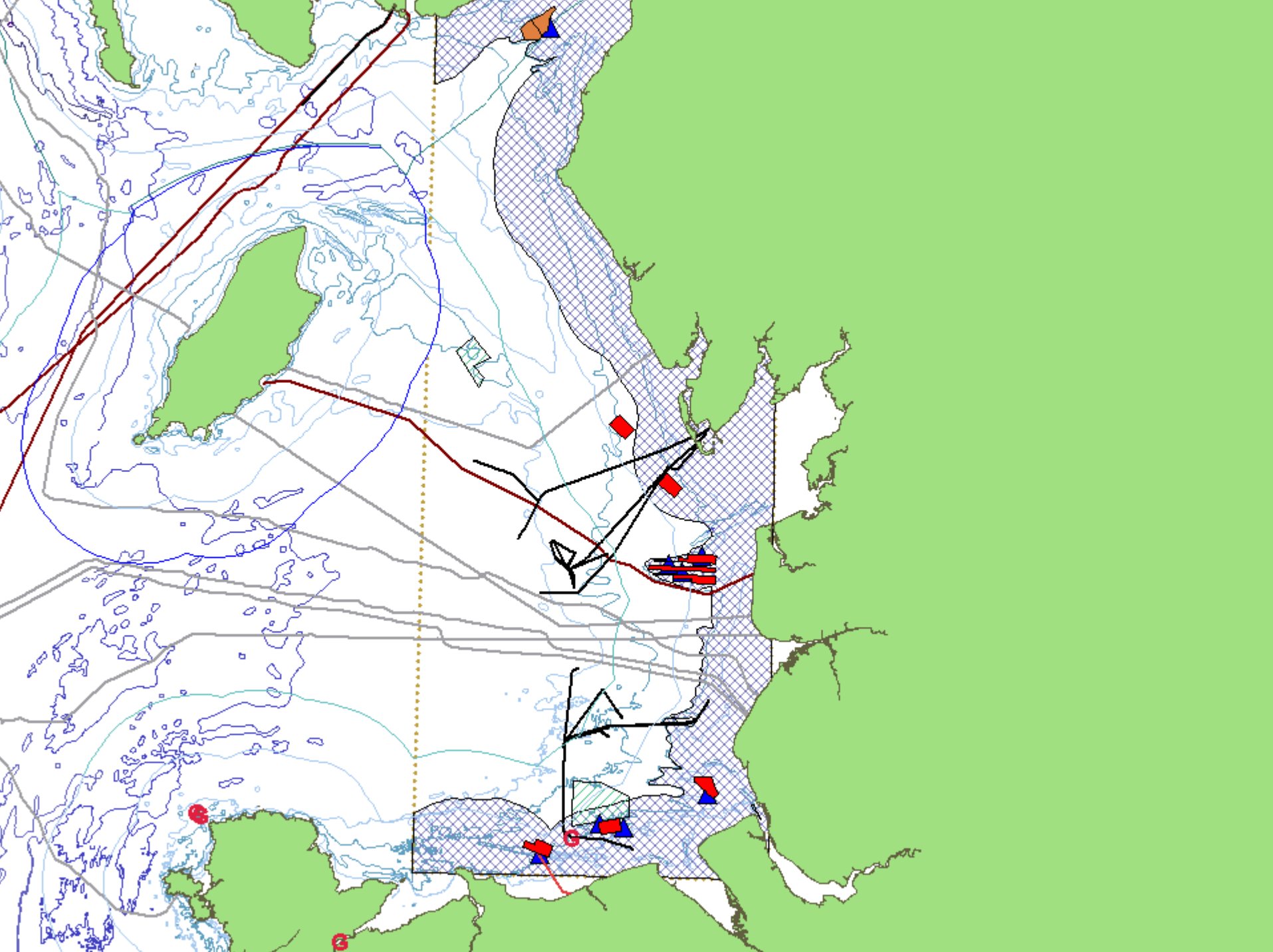
TENDER PROCESS AND CRITERIA

Tenders submitted October 15th 2003
amounted to 27GW

- Applicant
- Business Development Plan
- Development
- Decommissioning

Taking account of the SEA, Government policy and other relevant factors:

- To award the largest and most sought-after sites, in a competitive framework, to the applicants most ready and best fitted to develop each site to its optimum capacity
- To award other sites to applicants that meet acceptable minimum criteria and are fitted to develop the site"



SCENARIOS

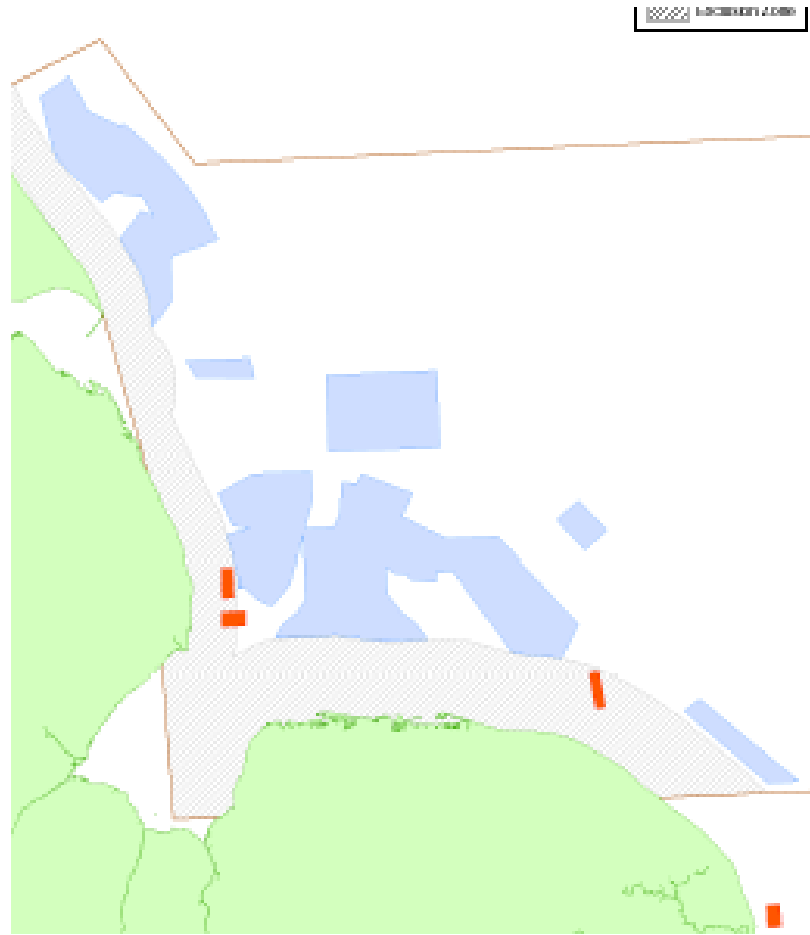
Table 5: Maximum credible scenario, MW and turbines installed

	2010 (MW)	Turbine numbers		2020 (MW)	Turbine numbers	
		3MW	5MW		3MW	5MW
Within territorial waters						
Greater Wash	1500	500	300	2000	667	400
Thames Estuary	1000	333	200	2000	667	400
Liverpool Bay	1000	333	200	2000	667	400
other	1000	333	200	1500	500	300
<i>sub-total</i>	<i>4500</i>	<i>1500</i>	<i>900</i>	<i>7500</i>	<i>2500</i>	<i>1500</i>
Beyond territorial waters						
Greater Wash	1000	333	200	5000	1667	1000
Thames Estuary	1000	333	200	3000	1000	600
Liverpool Bay	500	167	100	1000	333	200
other	500	167	100	1000	333	200
<i>sub-total</i>	<i>3000</i>	<i>1000</i>	<i>600</i>	<i>10000</i>	<i>3333</i>	<i>2000</i>
Total MW installed	7500	2500	1500	17500	5833	3500
Proportion of UK electricity supply	7.5%			17.5%		

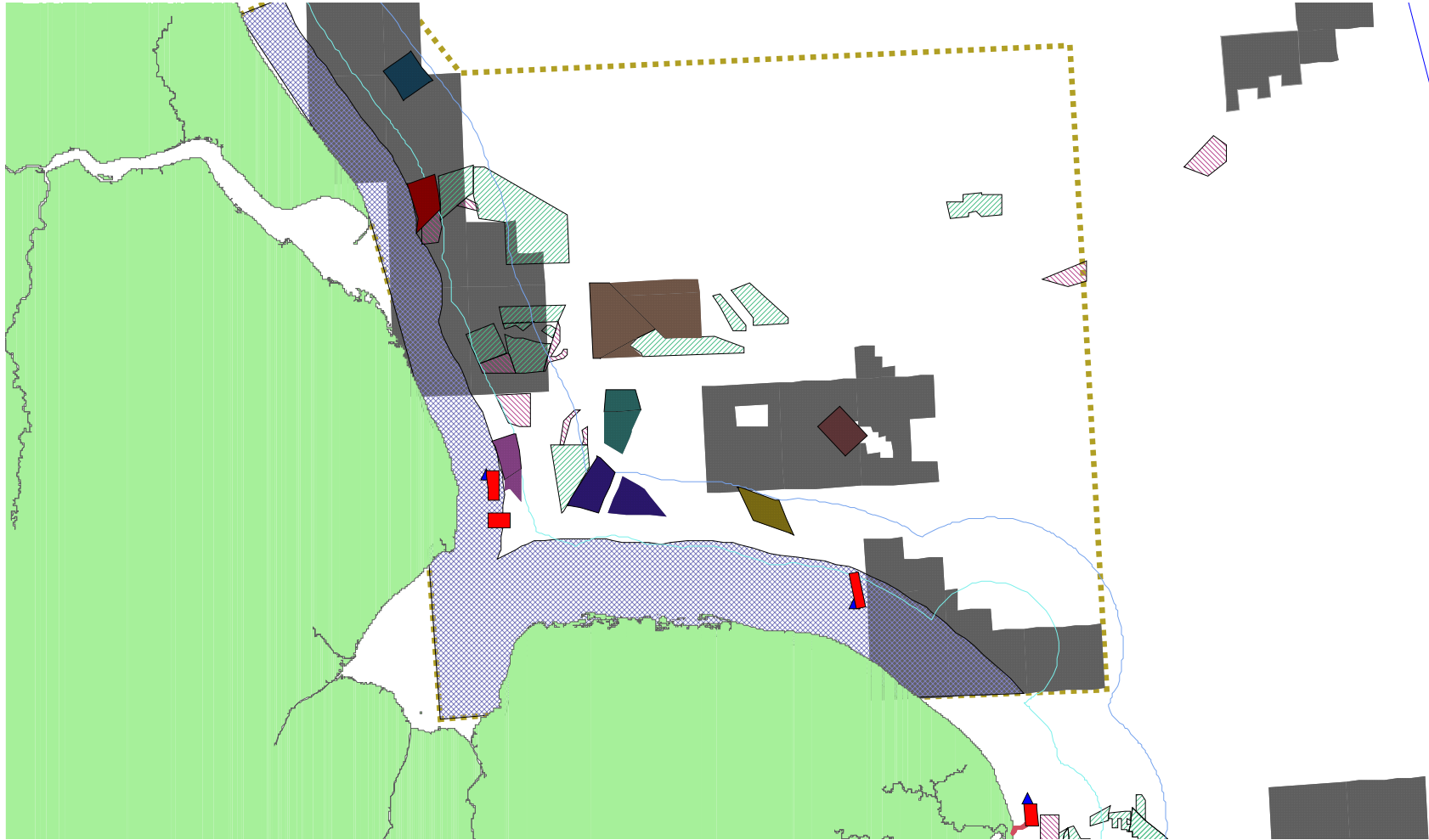
ASSESSMENT PROCESS

- Panel and expert advisors
- Interviews
- Policy context and SEA guidance
- High level input from Government Departments

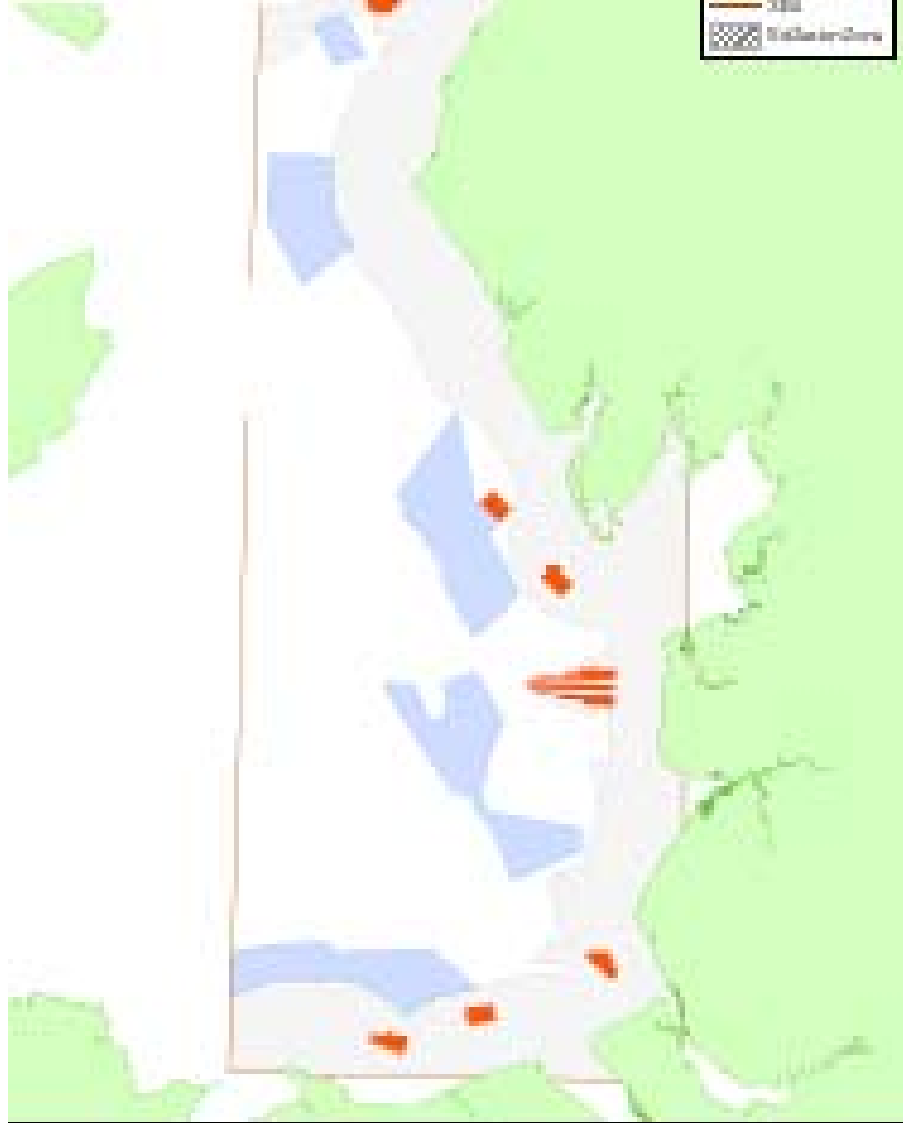
GREATER WASH



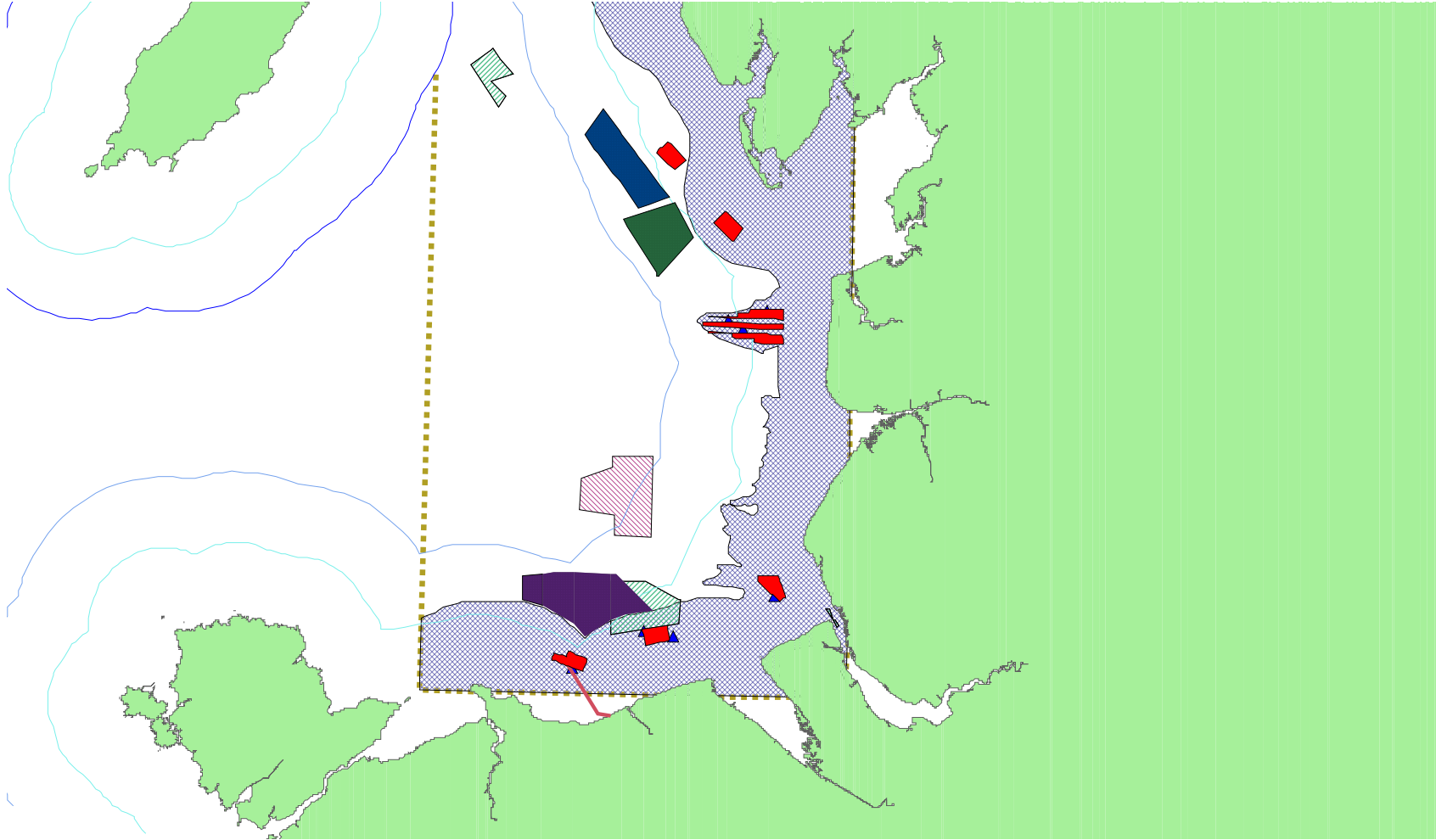
GREATER WASH



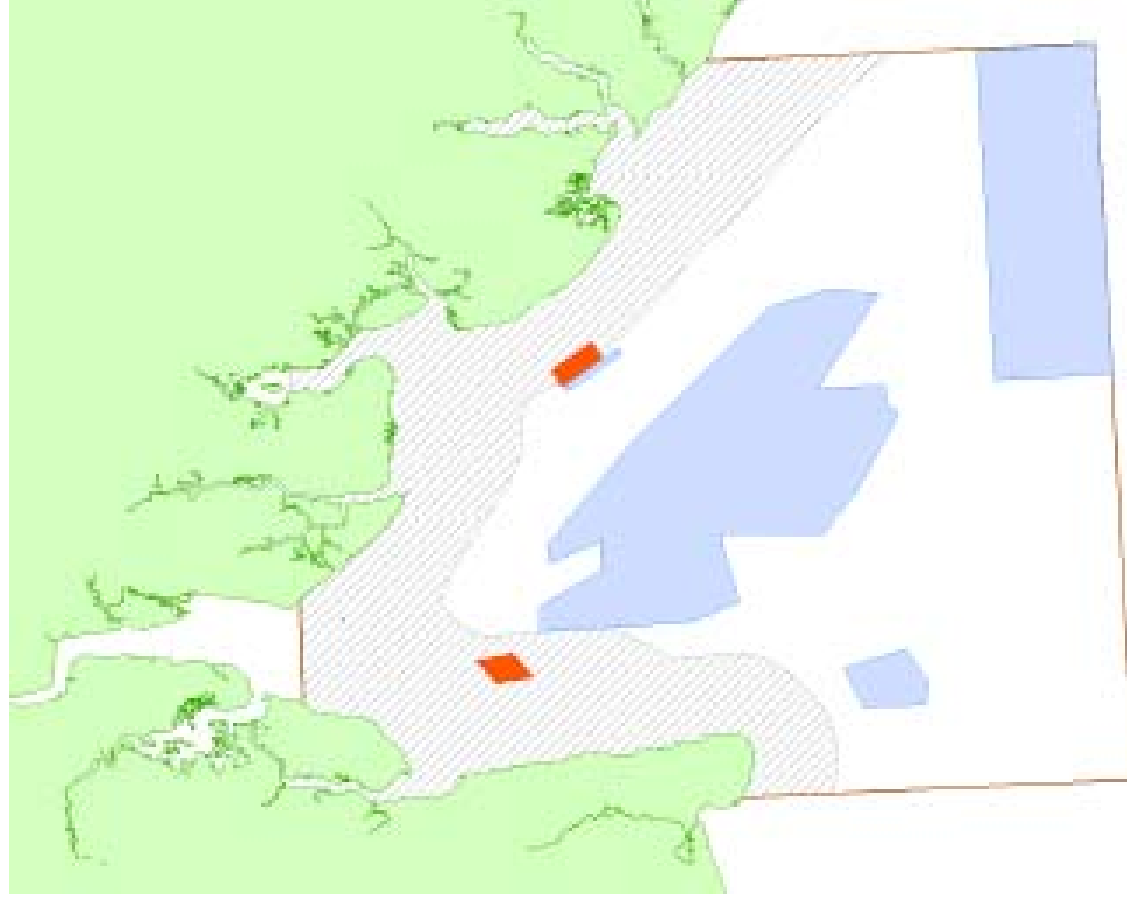
NORTH WEST



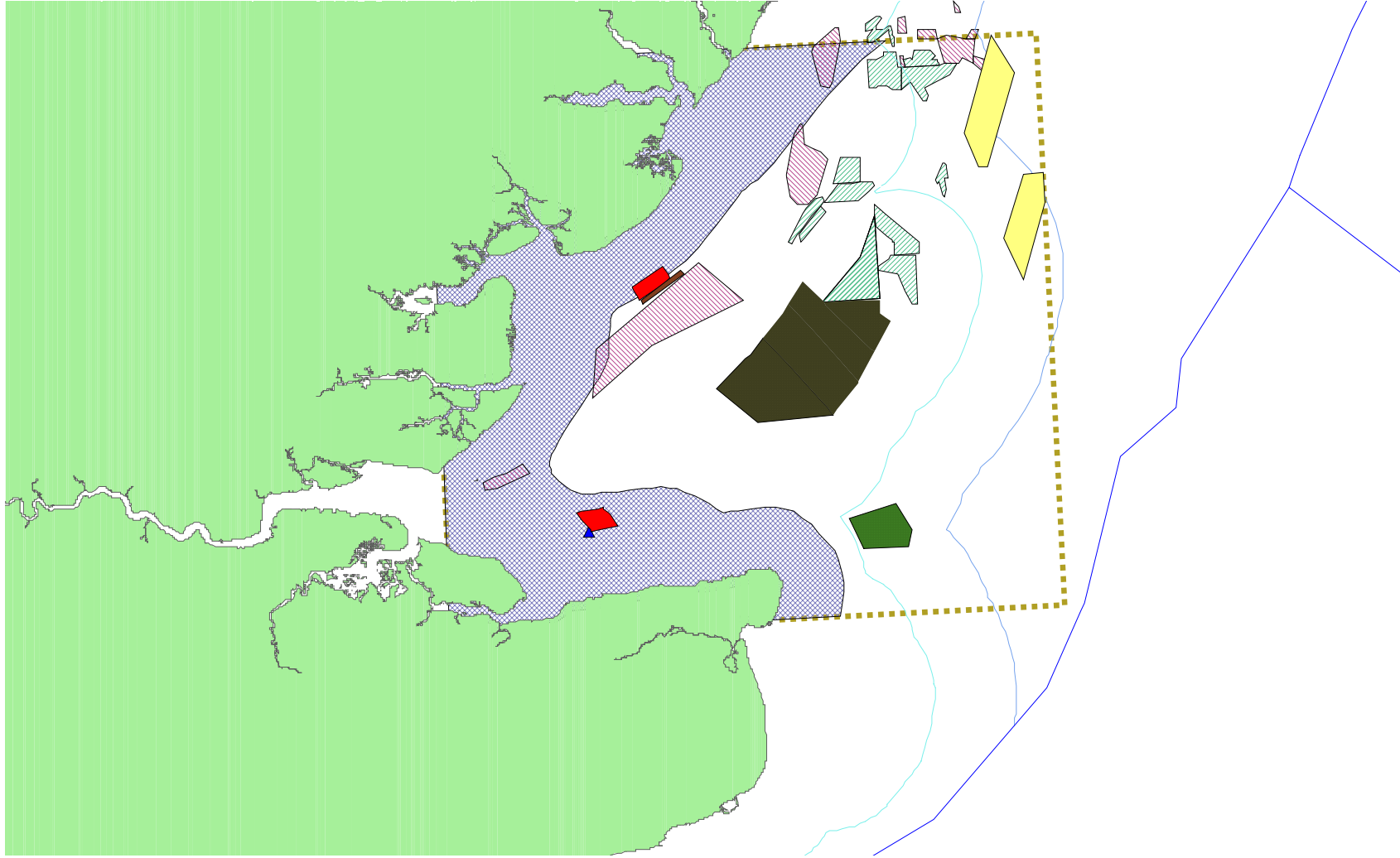
NORTH WEST



THAMES



THAMES



AWARDS

Within Territorial Water

Greater Wash	1605MW
Thames Estuary	1664MW
North West	1700MW
Total:	4969MW

Beyond Territorial Waters (REZ)

Greater Wash	2000MW
Thames Estuary	200MW
North West	-
Total:	2200MW

Greater Wash	3605MW
Thames Estuary	1864MW
North West	1700MW
Overall Total	7169MW

Key features

Agreements for Lease/License in Territorial Waters and UKCS (REZ)

Option Fees according to size Trust Fund (around £2mn)

Data conditions in lease

Lease – 40/50 yr term

Rent – same basis R1 (plus RPI, market review yr 20)

WHAT NEXT?

- RDA seminar
- REA/EIA workshops and guidance
- Trust Fund – data, research etc
- Grid issues
- 15% by 2015

OTHER WET RENEWABLES

UK good wave and tidal resource

Demonstration projects

Test centres (EMEC, NAREC)

Crown Estate consent

Technical and commercial viability

Environmental studies

Need for policy direction

Consideration in SEA