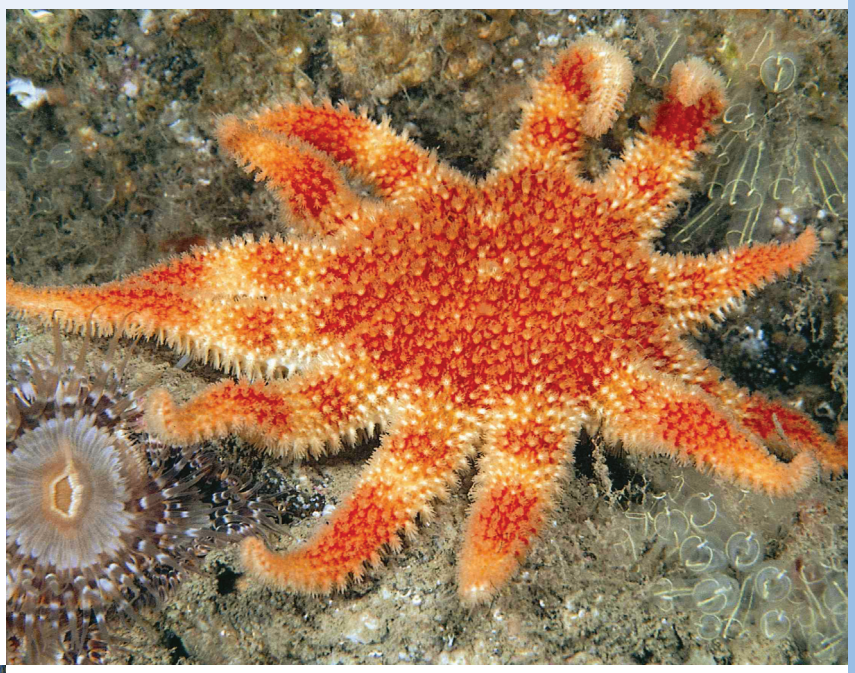
SOUTH EAST MARINE PROGRAMME

THE wildlife TRUSTS

The role of the **Regional Development Agencies** in sustainable development in the marine environment



ENGLISH NATURE

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SEEDA SOUTH EAST ENGLAND DEVELOPMENT AGENCY

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Document History

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GLOSSARY OF TERMS

Term	*Meaning / Definition*
ABP	Associated British Ports
EDS	Economic Development Strategy
GO	Government Office
Defra	Department of Environment, Food and Rural Affairs
DTI	Department of Trade and Industry
EA	Environment Agency
EC	European Commission
EEDA	East of England Development Agency
EIA	Environmental Impact Assessment
EMDA	East Midlands Development Agency
GDP	Gross Domestic Product
ICZM	Integrated Coastal Zone Management
LDA	London Development Agency
MCS	Marine Conservation Society
MoD	Ministry of Defence
MSC	Marine Stewardship Council
MSP	Marine Spatial Planning
NaREC	Centre of Excellence of New and Renewable Energy
NGOs	Non-governmental organisations
NWDA	North West Regional Development Agency
ODPM	Office of the Deputy Prime Minister
OSPAR	Oslo and Paris Convention for the Protection of the Marine Environment
PSA	Public Service Agreement
RDA	Regional Development Agency
RES	Regional Economic Strategy
RMNC	Review of Marine Nature Conservation
RSDF	Regional Sustainable Development Framework
RSPB	Royal Society for the Protection of Birds
RSS	Regional Spatial Strategies
SEA	Strategic Environmental Assessment
SEEDA	South East England Development Agency
SFC	Sea Fisheries Committee
SPA	Special Protection Area
SWRDA	South West Regional Development Agency
WFD	Water Framework Directive

Non technical summary

Introduction and Background

In recent years there has been an increase in pressure on the UK Government to implement legislation to protect the marine environment from unsustainable development. The Government has now given its commitment to the development of a Marine Bill. There has been a number of supporting strategic guidance documents published to promote a new system of managing the marine environment through the adoption of a marine spatial planning system on a regional sea scale. The system will be based on an ecosystem approach and it is likely that it will integrate with the current land use planning system.

Regional Development Agencies (RDAs) are responsible for improving the economies within the nine separate geographic regions in England. They play a key role in regional government by providing core funding for investment projects that are designed to improve regional economies. RDAs support regeneration of impoverished areas and improvements to the economy through projects aimed at increasing employment, skills and businesses with sustainable development as a driver. RDAs provide the funding to assist with regional planning and it is likely that a future integrated land and marine planning system with sustainable development priorities is likely to create a greater role and responsibility for RDAs. In addition, new marine conservation legislation will ensure that all marine-related investment and activities do not compromise the marine environment. This report provides an insight into the current role that RDAs play in the sustainable development of the marine environment and provides recommendations for the future.

Methodology

Information was obtained from conducting a literature review of RDA strategies and policies to establish what drives their decision-making process for investment and to establish if there is any reference to the marine environment made in their policies. Relevant statutory and non-statutory publications which explain the need for this report are also summarised. Several personnel within each RDA who have a degree of responsibility for the marine environment were identified and invited to respond to a questionnaire to establish more detailed information on each region's marine-related activity. Regional marine and coastal staff within key stakeholder organisations were also invited to participate in the consultation to give their views and comments on the subject. A total of 32 stakeholders were consulted.

Decision making framework for investment

The RDAs' main priority is to improve the economy of its region. Each RDA produces a Corporate Plan and Regional Economic Strategy (RES) which provides the overarching guidance on how the RDA plans to invest in the region. Corporate Plans are for three years whereas RESs are for a ten year period (currently 2002-2012). The Government has provided a remit for RDAs to comply with Tasking Frameworks, whereby each RDA is monitored and evaluated on performance based targets, one of which is sustainable development. Overall, the strategic framework guides how RDAs invest within their region. Ultimately, the policies that drive investment are the business or industry sectors which are likely to be successful within the region and regeneration of impoverished areas in need of enhancement. Within the last two years a system has been implemented which appraises all projects funded and delivered by RDAs for the incorporation of sustainable development principles. However, even this system does not appear to prioritise sustainable development, leading to projects with mainly commercial incentives.

Valuation of the marine environment

Each RDA values the importance of the marine environment but this varies geographically and relates to the perceived economic importance of the marine environment. In regions where marine industries play a key role in driving the economy and employment, the RDAs afford a significant value to the marine environment's importance. In regions where there is little marine-related activity, the marine environment is valued less highly.

Strategies and Policies for the Marine Environment

The valuation of the importance of the marine environment relates directly to the policies and strategies created by each RDA. The South East is the only region which has a specific policy within the RES to conserve natural resources, including marine resources. Compared to other regions, marine industries in the South East are responsible for the greatest economic marine-related role. All other regions have adopted policies which are related to the marine or coastal environment to some degree, however these policies are commercially focussed and contain very little reference to sustainability.

Marine projects

The RDAs' primary function is to improve the economy of the region. As such, where marine-related activities drive the economy, marine projects are important to RDAs. Therefore RDAs are mainly interested in funding and delivering projects in the marine environment that are commercially focussed. The marine-related activities include:

- Marine industries (marine technologies, ship building and repair etc.);
- Renewable energy (offshore energy, i.e. wind, tidal and wave);
- Ports and harbours;
- Tourism and coastal town regeneration;
- Fisheries and aquaculture; and
- Marine aggregates.

Very few of the marine projects supported by RDAs are based upon sustainable development principles. Only where projects rely on the direct extraction of a declining resource do RDAs prioritise sustainable development as the key driver in the project. This is particularly the case with promoting the fishing industry, despite declining fish stocks. All projects are required to be appraised for sustainable development principles. It appears that these principles do not take priority for most marine related projects as all projects prioritise commercial gain, which often conflicts with sustainability. In addition, there is a lack of transparency in the sustainability appraisal process and a lack of stakeholder engagement in projects, so it is difficult to be sure that sustainability is properly addressed.

Marine staffing

The sustainable development of the marine environment is not high on the list of priorities for most RDAs. The theme is covered however, by a number of different cluster teams within RDAs that all have a degree of responsibility for some aspects of the marine environment. Whilst there are no personnel specifically employed to cater for the marine environment, there are often

cluster managers for marine businesses where marine industries are economically important, and these typically work alongside the generic sustainable development teams, planning teams and environmental teams that all have some responsibility for marine environmental issues. Regeneration and rural teams also play a role in the marine environment when coastal towns are included in the RES for reinvestment and development.

Compliance with marine nature conservation designations

At present, RDAs have no framework for ensuring projects comply with statutory and non-statutory marine nature conservation designations. The responsibility is sub-contracted to consultants who undertake the Environmental Impact Assessment and rely on the consultation process and expertise of others to pick up on information regarding statutory sites. RDAs may also view these designated sites as a constraint rather than an opportunity. There is little appreciation of issues of sustainability in the wider marine environment beyond designated sites. Whilst sustainability principles are often incorporated, they are not the main drivers for investment projects, and overall there appears to be very little active support of RDAs for marine environmental improvements.

Strengths and weaknesses of the current legal and administrative framework

The weaknesses of the current legal and administrative framework which guide the work of RDAs act as a barrier to prevent RDAs from investing in sustainable marine related projects. The inadequacy of current legislation driving the protection of marine natural resources and the lack of an integrated planning system in the marine environment are influential factors in this respect.

The lack of remit for incorporating marine sustainable development into strategies and policies that drive investment within the region is also a key constraint. Economic benefits and commercial gains in terms of employment provision, regeneration, improvement to businesses and provision of skills and training are the key areas of priority within which RDAs make investment decisions. Sustainable development is not seen as a main priority and there is very little reference to sustainability in the RES and Corporate Plans that guide RDAs' investment. The economic incentive to ensure projects funded by RDAs are commercially successful often conflicts with environmental and sustainable development principles.

The lack of remit for policies that ensure sustainable development of the marine environment is the key constraint as there is currently no requirement for RDAs to actively promote sustainability in the marine environment.

Other weaknesses which relate to the main constraints include:

- Lack of guidance on the role and level of involvement of RDAs in the marine environment
- Lack of co-ordination and stakeholder engagement in marine-related projects
- Lack of core funding
- Lack of marine environmental expertise within RDAs.
- Lack of awareness and capacity building.

There are some strengths in the current legal and administrative framework which provide some opportunities for sustainable development within the marine environment. These include the current incorporation of the sustainability appraisal system, an understanding of the importance of the marine environment, the current core role RDAs play in funding projects and their inclusion in the development of Regional Spatial Strategies. With the future development of a Marine Bill and the adoption of a marine spatial planning system, there may be opportunities for RDAs to play a supporting role in the management of the marine environment. However the system needs to be

improved to provide a remit for RDAs to include sustainable development priorities in strategies that guide their investment decision-making process.

Horizon Scanning

The priority of RDAs' work will continue to be to improve the economy of the region through investment in successful businesses and industries, and the regeneration of impoverished parts of the region through improving opportunities for employment, through expansion of industry and supporting training and skills development. Marine related sectors which will provide a core focus of regeneration and economic investment by RDAs in the future are given below. The different sectors are given in order of importance to RDAs in terms of investment and regional economies:

- Coastal town and tourism regeneration
- Marine industries
- Renewable energy
- Ports and harbour development
- Fisheries and aquaculture
- Marine aggregates.

With improvements in the legal and administrative framework for marine management, it is likely that RDAs will be required to have greater responsibility for the sustainable development of these marine-related sectors in the near future.

However, until the changes in the legal and administrative framework are implemented, investment in these sector areas will continue to place little importance on the sustainability of the marine environment. This will result in continued impacts to the marine environment such as loss of marine habitats and species, over-exploitation of fish stocks, marine pollution, and damage to the visual aesthetic quality of coastal and marine environment to name a few.

The sectors above are important drivers to improving the economies of the regions of England. The importance of most of these sectors will continue to increase in the future as businesses develop and more investment is directed towards the marine environment. If RDAs do not invest in sustainable marine projects, the natural environment that underpins the prosperity of the marine-related sectors could be compromised, resulting in a degraded marine environment providing a poor economic and social return.

Recommendations

The future adoption of a marine spatial planning system on a regional seas scale will provide the framework within which regional government may potentially be given a greater responsibility and role in marine related activities. The forthcoming Marine Bill should ensure that any marine planning is undertaken with sustainability and conservation at the forefront of investment decisions.

These future changes in the legal system should aim to provide a framework and subsequent remit for RDAs to adopt more sustainable approaches to marine related activities. The following recommendations are given to enable RDAs to improve the sustainability of their marine-related activities, and prepare for potential changes in their marine environmental responsibilities:

- A remit for RDAs to develop long-term sustainable development strategies or policies for the marine environment (a 'Duty of Care' for the marine environment for RDAs);
- Improvements to the project sustainability appraisal system;

- The remit would create the requirement for a strategic review of marine-related activity and evaluation of sustainability;
- Improvement in the clarity of RDAs' role in the marine environment to ensure RDAs have adequate guidance on where their responsibilities lie, both now and in the event of future changes;
- Improvements in co-ordination within internal cluster or sector teams in RDAs that have shared responsibility for marine-related projects;
- Improvements to ensure all stakeholders are engaged in marine-related investment decisions so the sustainability of the marine environment is not compromised;
- Improvements in awareness of the value of the marine environment through capacity building;
- Improved funding mechanisms to develop marine projects with sustainable development priorities;
- Employment of marine personnel with environmental expertise to cater for the remit to develop marine related sustainable development policies. This will require the need for a marine environmental expert to ensure that marine-related investments do not compromise natural resources and conflict with sustainable development principles.

1 Introduction

1.1 Background to project

The Hampshire and Isle of Wight Wildlife Trust Ltd, on behalf of The Wildlife Trusts' South East Marine Programme, commissioned Atkins to undertake a project to investigate 'The role of Regional Development Agencies (RDAs) in the sustainable development of the marine environment'. The project is jointly funded by the South East England Development Agency (SEEDA), English Nature through the Department of Environment, Food and Rural Affairs (Defra) Aggregates Levy Sustainability Fund and the Wildlife Trusts.

The main driver for this project is increasing strategic pressure for improved marine environmental management along with an increased interest in the role that regional government plays in the sustainable development of the marine environment. The high-profile drive for marine environmental improvement has been led by the current drafting of a Marine Bill by Defra which is now at the forefront of Government plans in 2005, the Year of the Sea.

The Marine Bill will propose significant improvements in marine protection and management to ensure that all activities at the coast and at sea take full account of the local, strategic and cumulative impacts. In conjunction, a number of recent marine strategy publications call for improved integration between the management of the sea-land interface and propose an increased role for regions in marine spatial planning and management. Doubt amongst coastal and marine stakeholders has, however, arisen over the ability of regional governments to meet these proposed future marine responsibilities. Previous studies on the subject concluded that the current level of marine management undertaken by RDAs is extremely varied throughout the country with issues affecting their ability to including a lack of national and regional co-ordination, a lack of marine environmental incentive, and poor communication between internal governmental and national departments.

This is therefore an important time to take stock of the current role of RDAs to determine their understanding of the marine environment and if they will be able to adapt to future marine management responsibilities.. The topic areas where RDAs are likely to have the greatest impact in the future will be tourism and marine industry related developments, including offshore renewable energy. This is because currently the RDAs' main objectives are to improve the regional economy and employment, and regenerate declining areas. The importance of the marine and coastal interface for different regions varies enormously depending on the priority industries and economic drivers occurring. With such disparity between the regions, it is important to establish a baseline of the current roles RDAs play in the marine environment and offer recommendation for improvements or changes which will enable the regions to meet the proposed future marine environmental responsibilities.

2 Project Objectives and Methodology

2.1 Objectives of the project

The objectives of the report are to:

- Identify and provide a critique of the roles that each of the coastal RDAs play in the sustainability of the marine environment
- Provide recommendations for improvements to enable RDAs to be better prepared for current and future responsibilities for the sustainable management of the marine environment.

For the purposes of this project, marine development will be defined as any project that interacts with the sub-tidal marine environment, from coastal development, discharges, tourism, recreation and fisheries to marine aggregate extraction, shipping, renewable energy and other sea uses. Coastal activities on land that may have an influence on the marine environment will be included in this report. The tidal Thames Estuary is classified as a marine environment for the purpose of this report.

2.2 Methodology

The methodology used to meet the objectives above involved a literature review and consultation exercise.

2.2.1 Literature review

A review of literature was undertaken to carry out the following tasks:

- Identify and review the key legal guidance documents driving the sustainable development of the marine environment;
- Identify and review the legal guidance documents that are promoting an increasing role for RDAs in marine environmental management;
- Identify the key strategies of each RDA with policies that influence the sustainable development of the marine environment;
- Review RDA documents to assess the value attributed to the marine environment;

The documents identified and reviewed are given in the Reference section and the review of relevant literature for the project given in Section 3.

2.2.2 Questionnaire development

Two questionnaires were developed in conjunction with the client and based on the questions posed in the study brief. One questionnaire was designed to derive specific information from RDAs and was directed towards internal RDA staff involved in marine-related projects. A second questionnaire was designed to ask marine and coastal regional stakeholders their opinion of the marine-related activity of RDAs. A total of 16 questions were used to identify the following:

- Clarification of marine or coastal related RDA strategies or policies;
- Drivers for investment in the region by each RDA;
- Investment activity in the marine environment;
- Marine environmental resources;
- Valuation of the marine environment;
- Strengths and weaknesses in the current legal and administrative framework;
- Suggestions for improvements.

2.2.3 Consultation

For some RDAs, the marine environment is not perceived to be of particular importance for regional investment and therefore there are no key staff whom have a direct responsibility for the sustainable development of the marine environment. For consultation purposes therefore, the most relevant personnel within each RDA was identified whose job description involves some degree of responsibility for the marine environment. Previous projects undertaken by the project team i.e. the Integrated Coastal Zone Management (ICZM) in the UK: a Stocktake (Atkins 2004), had already identified a number of staff within Regional Government who are involved in coastal and marine activities to some degree within their departmental teams, whether it be within sustainable development, planning, environment or rural affairs. This list was built upon and updated to form a comprehensive list of all the most relevant staff within each RDA with responsibility for the sustainable marine development.

For some of the RDAs, as many as three to four staff were consulted to give a joint response on behalf of their RDA. In total, 20 RDA staff and 12 non-RDA staff with marine and coastal expertise within the regions were consulted.

The purpose of the internal RDA consultation was to establish a baseline of each RDAs' marine activities and also gain understanding of how they perceive their role in the sustainable development of the marine environment. Primary stakeholders working outside RDAs that are involved in driving marine planning and guidance on a regional and national level were also consulted to establish their perception of RDAs' current involvement in the marine environment. Additional consultation was undertaken with marine stakeholders who had expressed interest in commenting on the project, along with key regional government marine and coastal staff working for Regional Assemblies. Table 1 provides details of the stakeholders who were consulted.

Table 1 Consultation List and Responses

Region	Name	Job	Organisation	Response
North West	Mark Atherton	Head of Sustainable Development	NWDA	Co-ordinated questionnaire response on behalf of NWDA
North West	Beverley Doward	Head of Planning	NWDA	Assisted with response
North East	Ian Brannigan	Cluster Manager	One North East	Assisted with response
North East	Susan Stewart	Environment	One North East	Co-ordinated questionnaire response on behalf of One North East
North East	Francis Rowe	Environment Advisor	One North East	Assisted with response
Yorkshire and Humber	Michael Smith	Head of Sustainable Development	Yorkshire Forward	Delegated co-ordination of response to A White
Yorkshire and Humber	Angela White	Environmental Policy Advisor	Yorkshire Forward	Responded on behalf of Yorkshire Forward
Yorkshire and Humber	Laura Farr	Development Manager (Fisheries)	Yorkshire Forward	Assisted with response
East Midlands	Andy Barron	Environmental Sustainability Advisor	EMDA	Responded to questionnaire
East of England	Paul Hinds	Environment Manager	EEDA	Responded to questionnaire on behalf of EEDA
East of England	Nina Cunningham	National RDA Sustainable Development Manager	EEDA	Provided names of personnel within some RDAs involved in sustainable development
London (Thames)	Nicholas Dufty	Development Policy Manager	LDA	Responded to questionnaire
London (Thames)	Lesley Harding	Environment Sector Manager	LDA	Responded to questionnaire
South East	Graham Tubb	Head of Sustainable Development	SEEDA	Delegated co-ordination of SEEDA response to A McCallum
South East	Andrea McCallum	Solent and Hampshire Area Manager	SEEDA	Questionnaire completed on behalf of SEEDA
South East	Simon Richardson	Environmental Resources Advisor	SEEDA	Responded to questionnaire
South East	Jonathon Williams	Marine Southeast	SEEDA/Marine South East	Questionnaire completed
South West	Claire Gibson	Head of Planning	SWRDA	Questionnaire completed on behalf of SWRDA
South West	Diane Mompoloki	Head of Rural	SWRDA	Assisted with SWRDA response
South West	Jonathon Coe	Marine Southwest	SWRDA/Marine South West?	Assisted with SWRDA response
Non RDA Stakeholders				
North West	Caroline Salthouse	Head of North West Coastal Forum	North West Regional Assembly	Questionnaire completed and response on behalf of North West Coastal Forum
Yorkshire and Humber	Will Kemp		Yorkshire Regional Assembly	Responded to questionnaire
North East	Mike Quigley	Head of Maritime (NE)	English Nature	Comments received and consultation forwarded on to Richard Hall
North East	Richard Hall	Regional Policy officer	English Nature	Comments received on One North

				East's nature conservation activity
South West	Roger Covey	Head of Maritime (SW)	English Nature	Questionnaire completed and views of English Nature given
South West	Kaja Curry	Tourism Development Manager	Carradon District Council	Questionnaire completed and views of local authority given
National	Dornford Rugg	Head of Marine and Waterways Division	Defra	Comments received on Defra's commitment to the marine environment
National	Diane Roberts	Head of RDA Unit, Rural Economies and Strategies Division	Defra	Comments on the role of RDAs received
National	Jayne Boys	Sustainable Development Unit	Defra	Comments on RDA activity
National	Chris Mills	Head of Marine Nature Conservation	Environment Agency	Delegated responsibility for consultation to Helen Young
National	Helen Young	Marine Advisor	Environment Agency	Comments received on the Agency's role for the marine environment and thoughts on the inclusion of RDAs.
South East	Ian Hepburn	Director of Regional Conservation Policy	The Wildlife Trusts in the South East	Provided answers to key questions in the questionnaire

The consultees were contacted by telephone to invite them to participate in the project. Once the consultation list had been finalised, the questionnaire was sent to each consultee via electronic mail which was the most appropriate form of communication due to the short time frame of the project.

3 Literature Review

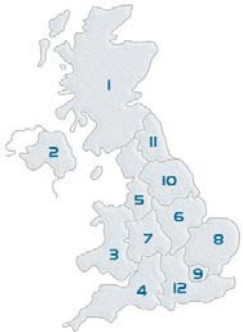
3.1 The RDA framework

The following section provides a summary of the policy and administrative framework within which the RDAs undertake their activity.

RDAs are the drivers of economic performance in the regions and aim to enhance the regions' skills base, promoting social and physical regeneration in the regions, and encouraging sustainable development. RDAs also work closely with the Government Offices (GO) in their region on economic development and regeneration programmes. GOs work with regional partners including local authorities and RDAs to achieve government objectives in a joined up manner. The Board members of Regional Chambers or Assemblies are accountable to Parliament and represent the interests of the region in relation to the work of RDAs.

RDAs have a range of roles within their regions, but they are primarily strategic economic development agencies that influence economic investment in the region. RDAs also act as advocates by influencing national policy for example, and facilitate networks and partnerships by working with stakeholders in the region to achieve shared goals identified in the Regional Economic Strategies (RESs). RDAs have responsibility for commissioning and funding projects/programmes, and they also play a role in delivery of projects although this is an increasingly small role as RDAs devolve funding and responsibility for delivery to sub-regional partnerships (Diane Roberts, Defra pers. com. 2005).

RDAs were established under the Regional Development Agencies Act 1998, following Government proposals to develop new procedures in regional planning guidance. They are governed by policies created by the Office of the Deputy Prime Minister (ODPM). The aim of RDAs is provide co-ordinated regional economic development, regeneration and sustainable development within each of England's nine regions. The UK Government's devolution agenda has also placed greater emphasis on strengthening regional government and providing opportunities for improving regional economies through improved co-ordination, regulation and management.



- **4** South West of England Development Agency*
- **5** North West Regional Development Agency*
- **6** East Midlands Development Agency*
- **7** Advantage West Midlands
- **8** East of England Development Agency*
- **9** London Development Agency.
- **10** Yorkshire Forward*
- **11** One North East
- **12** South East England Development Agency*

* RDAs with coastlines (for the purposes of this project only RDAs with coastlines were consulted, along with the LDA whom have responsibility for the Thames estuary).

The Government's policy on regional governance is set out in the White Paper '*Your Region, Your Choice: Revitalising the English* Regions' ODPM 2002[a]), in which the specific aims of RDAs are defined as:

- further the economic development and the regeneration of their area;
- promote business efficiency, investment and competitiveness in their area;
- promote employment in their area;
- enhance the development and application of skills relevant to employment in their area; and
- contribute to the achievement of sustainable development in the United Kingdom, where it is relevant to their area to do so.[0]

This is reflected in the revisions to the land-use planning system as set out in the Green Paper '*Planning: Delivering a Fundamental Change*' (ODPM 2002b) with the objective of reforming the planning system by streamlining plan-making and development control processes and placing a greater emphasis on Regional Spatial Strategies (RSS) and Regional Sustainable Development Frameworks (RSDF). RDAs work within regional planning guidance and local authority development plans, which set out the long-term spatial planning context for the region. This includes marine and coastal areas down to the low water mark (Joint Nature Conservation Committee 2004).

The 2002 Spending Review by the ODPM committed the Government to a new Public Service Agreement (PSA) target where Regional Economic Performance PSA Indicators were set to:

"*Make sustainable improvements in the economic performance of all English regions by 2008 and over the long term reduce the persistent gap in growth rates between the regions, demonstrating progress in 2006*".

Each region is now monitored for its economic performance though a series of Tasking Frameworks which create target outputs for different sectors within set periods of time. Each RDA is required to publish a Corporate Plan and associated RES which set out policies and action plans in order to meet the objectives in the Tasking Frameworks.

Further changes are likely following '*The Lord Haskins' Review of Rural Delivery*' (ODPM, 2003), which outlined improvements to the terrestrial planning system and which is likely to have an influence when integrating marine spatial planning in the future. The review proposes an increased role for RDAs in the planning system and concluded that national policy setting and delivery should be separated. Although the review focused on the management of the rural environment, it will act as a catalyst for potential changes in the how RDAs prioritise funding for projects which will influence marine related activities. The key recommendations for RDAs from the report are:

- Social and economic programmes should be delivered by RDAs, local authorities and the voluntary and community sector;
- RDAs should play a key role in the devolution of Defra's rural, economic and social agenda; and
- RDAs should deliver England's Rural Development Programme.

3.1.1 Associated guidance

Other key documents include:

The rural and urban White Papers '*Our Towns and Cities: The Future*' (ODPM 2000a) and '*Our Countryside: The Future*' (DETR 2000). These set out a vision for the regeneration of urban centres and rural areas. Both recognise the regional diversity and local distinctiveness of urban and rural places and the need for policies to reflect these differences. They also recognise the need to improve the quality of life as an important means of securing greater economic competitiveness. Both White Papers contain policies and programmes for improving the quality of life in their respective areas, including measures for regeneration, planning, improving services, tackling poverty and social exclusion and protecting the countryside.

The '*Rural Strategy 2004*' (Defra 2004[a]) sets out Defra's policies on how they will attempt to meet the challenges facing the sustainable development of rural communities. Building on Lord Haskins' recommendations, Defra aims to establish new, more effective delivery arrangements for rural areas, with greater devolution, and a key role for RDAs so that decisions are taken nearer to those they affect (Defra 2004 [a]).

There are associated White Papers for topics including farming, education, enterprise and innovation, manufacturing and aviation.

These papers are in addition to the national and regional planning guidance which provides the framework for land-use planning to which the Regional Development Strategies must adhere. There are also movements towards Integrated Regional Strategies (IRS) which would be developed by GOs, Regional Assemblies and Regional Development Agencies. This is being promoted in the South West where it is anticipated that the South West Integrated Regional Strategy will help the region to develop a common set of objectives and outcomes within an Integrated Regional Framework. A shared understanding of the region should also encourage more effective decision making. The Regional Economic Strategy will be fully compatible with the IRS.

The Regional Strategies also need to be developed within the European Framework, new Directives relevant to RDAs in the marine environment include:

- *Strategic Environmental Assessment Directive (SEA)* (European Commission, 2001) and associated UK Regulations;

The SEA Directive commits to achieving sustainable development and one of the aims of the Directive is: "*to provide for a high level of protection of the environment and to contribute to the integration of environmental consideration into the preparation and adoption of plans… with a view to promoting sustainable development*". The ODPM has issued SEA guidance for land use planning. Consultation and the production of an Environmental Report will be a requirement of the SEA for certain plans or strategies.

- *Water Framework Directive 2000*

The Water Framework Directive (WFD) is the most substantial piece of EC water legislation to date. It requires all inland and coastal waters to reach '*good status*' by 2015. This will be achieved by establishing a river basin district structure within which demanding environmental objectives will be set, including ecological targets for surface waters. In the UK, the Environment Agency has called for planning authorities and RDAs to be duty-bound to take account of the Directives' objectives when developing the RSSs and Local Development Plans.

3.2 Decision making process for investment

Investment by each RDA is guided by Tier 1, 2 and 3 outputs and objectives within the RES. Corporate Plans are written to guide how each RDA intends to deliver the outputs set in the RES. Tasking Frameworks are used to measure performance of each RDA. RDAs are required to invest in projects that meet the objectives, policies and targets of the aforementioned plans.

With the main drivers for guidance documents being economic gain and regeneration, the decision to invest in a proposed project is based on perceived economic benefit, its need within the region in providing employment and its value for money, with investment based on the likelihood of success of the project (Paul Hinds EEDA pers. com. 2005). Investment is also undertaken in order to regenerate areas of the region which are not performing well economically. In the South East, for example, the bulk of investment is for districts exhibiting poor economic

performance. In response to this, investment is directed developments that promote conventional businesses in the areas needing a boost in economic performance (Ian Hepburn, The Wildlife Trusts, pers. com. 2005).

Thus the content of RESs which defines how the RDA will invest in the region is dependent on the different economic drivers within each region in addition to the areas that require regeneration.

3.2.1 Corporate Plan

The Corporate Plan for each RDA is required to specify how the RDA intends to deliver the core outputs specified in the RDA Tasking Framework (see below) and sets out how the outputs will be achieved, monitored and evaluated. Key policy areas that need consideration within the Corporate Plan include crime reduction, employment, international trade, energy and the leisure industry.

The Corporate Plan also sets out how that RDA will address the priorities identified in the RES in support of its statutory role and responsibilities. The priorities are based on the delivery of the Government's PSA Targets on regional economic performance, sustainable development, and productivity (see below).

Plans for 2005 – 2008 were required for submission by mid January 2005.

3.2.2 Regional Economic Strategy (RES)

RESs are essentially a high level strategic framework for economic development, with the fundamental aim of increasing regional income and productivity. The RES provides a regional scale overview of key issues and economic drivers, such as employment and tourism, and sets out developmental and economic objectives through which to strengthen such areas of the economy. The RES is a means to address sustainable development at a regional scale, identifying strengths and weaknesses in order to clarify where investment is required and how key partners and organisations may contribute to economic growth. In doing so, the RES also highlights areas of opportunity for business and where development might be supported by the RDA.

In the RES there are three current tiers of targets:

- Tier 1 targets determine goals for the region by 2010;
- Tier 2 targets are regional targets that determine goals for the region by 2005/6 and incorporates all partners, and not just the RDA; and
- Tier 3 targets that relate to the specific outcomes of RDA investments - i.e. what each RDA will do by 2005/6.

For example in the North West, RES priorities are measured by Tier 2 indicators which include:

- Sustainable Economic Performance
- Regeneration
- Urban
- Rural
- Physical development
- Employment
- Skills
- Productivity
- Enterprise
- Direct Foreign Investment

- Innovation.

All regions are different however, which is why the UK Government has decided to follow the route of devolving decision making (and funding) to a regional level (Diane Roberts, Defra pers. com. 2005). Priorities for investment in one region will not be the same as for another and this is reflected in each of the RES. These strategies are developed in full consultation with a wide range of regional and local stakeholders, (public, private, community and voluntary sectors). Six of the RESs are being reviewed in 2005 (Diane Roberts Defra pers. com. 2005).

In the North West, all proposals for NWDA funding are appraised against their strategic fit with the RES, outputs and value for money, and the proposals are assessed, in some detail, as to their sustainability. One of the appraisal questions is related to the protection and enhancement of the environment but there is no reference to the marine environment (Mark Atherton NWDA pers. com. 2005).

3.2.3 Tasking Framework

RDAs are tasked to deliver the objectives in their RESs, whilst at the same time contributing to national policies. From April 2005 this will mean RDAs contributing to ten key national PSA targets (Diane Roberts Defra pers. com. 2005). The purpose of the RDA Tasking Framework is to help the RDAs and government departments to work on regional priorities in a way that contributes to sustained national economic development.

Specified in the Tasking Framework, these targets are effectively core outputs or tasks required of the RDAs. The Tasking Framework includes targets such as employment creation, business creation, skills development and the regeneration of public infrastructure. Within the Tasking Framework, three of the PSA targets have been created by Defra and include sustainable development targets. These regional and national elements are reflected in the RDA Corporate Plans, which are currently being drafted and will be approved by Ministers in the coming weeks. RDAs are expected to provide commitments to meeting these targets and the role that RDAs play in the sustainable development of the marine environment could come under these requirements (Paul Hinds EEDA pers. com.2005).

3.3 Drivers for increased Regional input to marine management

There has been considerable interest in marine management in recent years and national government has commissioned a number of reviews on different aspects of the current marine management framework. A number of these reviews have recommended an increased role for the regions and are therefore relevant to this study. Following these reviews Defra has concluded that a Marine Bill is likely to be the most effective tool for delivering sustainable marine management and the conclusions of the reviews are likely to provide the basis for any future Bill. This section therefore summarises the recent reviews of the marine environment and its management and identifies the likely implications for RDAs.

Commissioned by Defra in 1999, the Review of Marine Nature Conservation (Defra 2004[b]) assessed how effectively the UK system is protecting the marine environment and made proposals for improvement. This was one of the first important guidance documents to recommend new legislation for the protection of the seas and since its publication there has been

increasing pressure on the UK Government to implement legislation for the safeguarding of the marine environment. It is likely that a Marine Bill will be developed in the next few years.

The Prime Minister, in his speech on climate change in September 2004 stated that the Government strongly supports the arguments for a new approach to managing our seas, including a new Marine Bill (Morley 2004). Defra's Five Year Strategy sets out the intention to work on the Bill, stating that the Bill will provide the framework for those who regulate marine activities to ensure the sustainable use and protection of our marine resources (Defra 2004[c]). Defra's Secretary of State, Margaret Beckett also declared that the Government is committed to the Marine Bill with a framework based on marine spatial planning and the ecosystem approach, to protect biodiversity and regulate better, to allow different users of the sea to develop harmoniously and sustainably, and to adapt to new challenges such as climate change (MCS 2005). The framework will allow the different uses of the sea – including wildlife protection, offshore wind and other industries – to develop harmoniously (Defra 2004).

In his speech at the Coastal Futures Conference in 2005, the Minster for Environment and Agriculture stated that the Government's aim is to protect and enhance the marine environment whilst at the same time driving sustainable economic and social benefit. The Marine Bill will be an integrated system but some marine functions will be reserved for the UK Government, devolved and regional administrations (Morley 2005).

Assuming the Government fulfil its plans for a Marine Bill, the implications of the future changes will mean RDAs will have a greater responsibility to take the sustainable development of the marine environment into account when undertaking investment decisions.

Review of Consenting Regime for Development in Marine Environment

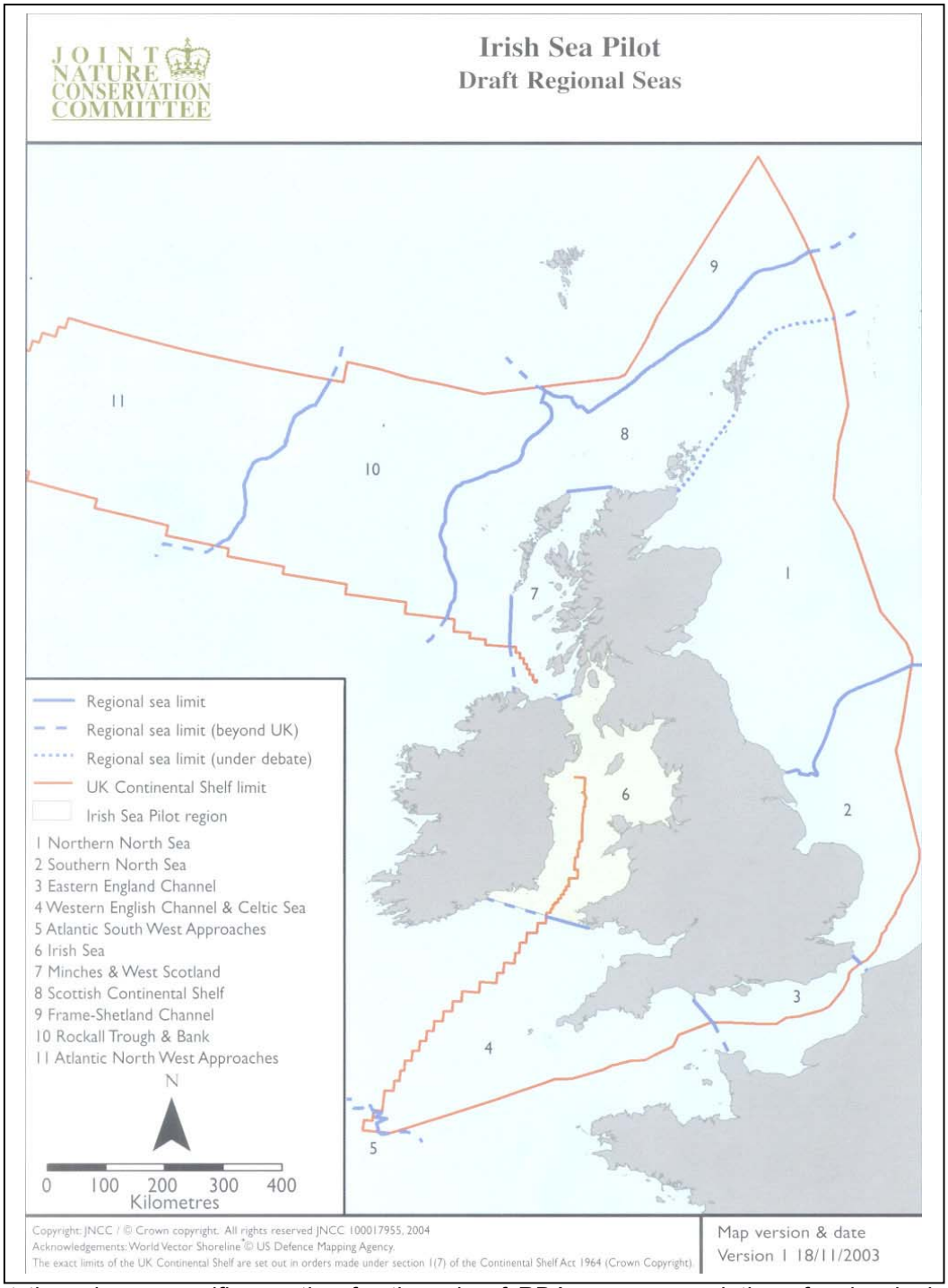
The ODPM commissioned a review - undertaken by a unit in the Department for Trade and Industry - of the consenting procedures for developments in coastal and marine waters. The Review's objective is "*to reduce the complexity of the regime governing development in coastal and marine waters*" and aimed "to *make it easier for business to operate in the sea, ensuring that the Government's objectives for the protection of the marine environment can be met and preventing unnecessary interference with other legitimate uses of the sea*". The report was undertaken in 2003 but remains unpublished. It is believed that the review will have identified a number of changes to the consenting regime and may confer greater responsibility for regional government or a future Marine Agency. Although this reflects the recommendations from other reviews and government statements, there is little evidence to support this supposition at present.

Irish Sea Pilot Project

As part of the Review of Marine Nature Conservation (RMNC) a pilot study for improved marine management was undertaken in the UK waters of the Irish Sea. The pilot study (JNCC 2004) assessed the efficiency and effectiveness of current governance and enforcement regimes in implementing current legislation relevant to marine nature conservation. The study recommended:

- R29 (i)The introduction of marine spatial planning as a statutory process involving national planning guidelines, strategic plans at a Regional Sea level and more detailed plans;
- (iii) Marine spatial planning should adopt an ecosystem approach and seek to implement conservation and other sustainable development objectives;
- R44 Small scale, funded trials of protected seas should be set up at a Regional Seas scale with the involvement of the fishing industry;
- R45 Regional Advisory Councils should be established to enable effective stakeholder involvement and have a remit for fisheries and environmental management;
- R60 Defra should take the lead in developing strategic plans for the Regional Seas in full consultation with other governmental departments and devolved administrations.

Figure 1 Draft Regional Seas boundary map, Irish Sea Pilot Project. Source: JNCC 2004, p76



Whilst there is no specific mention for the role of RDAs, recommendations for developing a marine spatial planning system based at a Regional Sea level suggests that RDAs' current involvement in terrestrial spatial planning and sustainable development at a regional level may potentially be integrated with the proposed changes.

The boundaries for the UK's Regional Seas recommended in the report have been based on biogeography using factors such as water temperature, depth and currents (Figure 1). The boundaries of the regional seas exhibit similar geographical boundaries (with overlaps) to that of the UK administrative regions within which RDAs operate and have responsibility. Regional Seas 1 and 2 on the east coast of England have boundaries that cross the regional boundaries of the RDAs. Also on the South coast, there is a small overlap between SWRDA and SEEDA in Regional Sea 3/4. Table 2 below shows the different regions and RDAs.

Table 2 Regional Seas and corresponding RDA regional boundaries

Regional Sea	Region	RDA
1	North East Scotland and North East England	One North East and Yorkshire Forward
2	East and South East England	Yorkshire Forward EEDA and LDA
3	South East England and South West England	SEEDA, SWRDA
4	South West England	SWRDA
6	West Wales and North West England	NWDA

Regional Sea 5 is located beyond the SW Corner of England past the Isles of Scilly.

European Marine Strategy

The Communication from the EC entitled, '*Towards a strategy to protect and conserve the marine environment*' (EC 2002), is the first European step towards tackling marine environmental issues. It is the EC's intention to produce a Marine Strategy in due course which will be based on the ecosystem approach, defined as "*the integrated management of human activities based on knowledge of ecosystem dynamics to achieve sustainable use of ecosystem goods and services and maintenance of ecosystem integrity*" and will provide a future framework within which Member States will work to achieve sustainable use of marine resources. This will be through working with marine international conventions e.g. The Oslo and Paris Convention for the Protection of the Marine Environment (OSPAR), industry, communities, non-governmental organisations (NGOs), and stakeholders. These international marine conventions, also known as Regional Seas Conventions, will have an important role in helping to elaborate the Europe-wide objectives in more detail and developing action plans at regional levels.

Marine Stewardship Report

The Government published its first Marine Stewardship Report, '*Safeguarding our Seas*' in 2002 (Defra 2002[a]), in which the Government endorsed the use of an ecosystem approach. The Government said the new approach was more strategic and placed the emphasis on maintaining the health of ecosystems, in contrast to past management of oceans which "*has often been fragmented, sectorally-based and driven by short-term economic gain*".

In this document Defra states the importance of a regional element to the management of activities in the marine and coastal environment. The report sets the regulatory framework for managing specific coastal issues whilst encouraging a more flexible discretionary approach to the management of coastal areas. This builds on existing administrative structures so that local authorities, harbour authorities, environmental agencies and other bodies work together at the most appropriate level. Rather than impose decisions Defra is seeking to encourage local solutions and the development of opportunities within a clear framework of national policies.

The proposals set out in '*Safeguarding our Seas*' were disseminated for consultation in the '*Seas of Change*' report (Defra, 2002b) with a summary of the consultation and Government responses set out in '*Government's response to its Seas of Change Consultation to help deliver our vision for the Marine Environment*' (Defra 2004a). Referring to the reports, Dornford Rugg, Head of Defra's Marine and Waterways Division states (pers. com 2005):

"*Defra sees regional and local delivery arrangements as important in the sustainable management of marine and coastal activities and the protection of the marine and coastal environment.*"

3.3.1 Other relevant publications

Potential Benefits of Marine Spatial Planning to Economic Activity in the UK: Royal Society for the Protection of Birds (RSPB 2004)

With the increase in discussion on the potential importance of marine spatial planning (MSP) in the future, the RSPB commissioned a study to assess the economic benefits of applying this to the UK. Most environmentalists are aware of the importance of MSP, but economic sectors may need convincing if there is to be a universal approval of its adoption. The review stated that economic benefits derived from the marine environment were substantial, with marine related industries turning over £69 billion in 1999-2000. These figures included coastal and land-based activities as well as those using the open sea, highlighting that the marine environment cannot be taken in isolation and that coastal activities that influence the sea should be included in any assessment. The main findings of the review identified that marine spatial planning could provide significant potential economic benefits to the UK by:

- Facilitating sector growth – MSPs can provide a framework that facilitates the sustainable development of different economic activities, therefore helping to enhance income and employment;
- Optimising the use of the sea – MSPs can help to ensure that maximum benefits are derived from the use of the sea by encouraging activities to take place where they bring most value and do not devalue other activities; and
- Reducing costs – MSP can reduce the cost of information, regulation, planning and decision making.

Environment Agency Marine Strategy

The Environment Agency (EA) is currently developing its '*Marine Strategy*', planned for release in late summer 2005. This will define the EA's work in the marine environment for the next 10 years in line with assisting Government and others to achieve a better marine environment. The EA Marine Strategy is intended to help others to clearly understand the EA's role in the marine environment and to state how it will respond to pressures on the marine environment and current drivers for change. The EA believes that it is important that RDAs look towards the marine environment when preparing their strategies due to the considerable effect that development on land and at the coast has on the marine environment (Helen Young, Environment Agency pers. com. 2005). The EA's role in management at the land sea interface is a key component of the strategy.

Defra Five Year Strategy

Central Government understands the importance of regional government when delivering sustainable development. In Defra's '*Five Year Strategy*' (Defra 2004[c]), increasing responsibility and funding has been given to RDAs for environmental and sustainable projects. At least £5 million will be made available to RDAs for each of the next three years to provide regional coordination amongst the various bodies that will be delivering objectives of a Business Resource Efficiency and Waste programme. This aims to help businesses to become more resource efficient, minimise waste production and its impact, and increase recycling.

The strategy also states that Defra is committed to working in partnership with RDAs and Government Offices to ensure that regional sustainable development issues are tackled in a way that serves national

interests more effectively. There are also a number of previous reviews referring to the increased role of RDAs from a coastal zone management perspective and these are summarised in Appendix A.

The UK Government's commitment to a future Marine Bill provides the main foresight into the potential increase in regional governmental activity in the sustainable development of the marine environment. The momentum for the Marine Bill has been driven by important guidance documents with recommendations that MSP is adopted on a regional seas scale using the ecosystem approach where marine nature conservation is actively enforced.

4 RDA Activity in the Marine Environment

Seven of the nine RDA regions in England have extensive coastline and the LDA has responsibility for the Thames Estuary. Each of these regions benefit from and rely in part on the marine environment for economic purposes and for natural resources. By inference, the RDAs have a responsibility to understand the value of the marine environment and the pressures upon it and in doing so should be able to formulate policies to manage and protect that environment along with other agencies and businesses (Simon Richardson, SEEDA, pers. com. 2005). The following section provides details of the value of the marine environment afforded by each RDA, and identifies associated strategies and policies to support their investment in the marine and coastal environment.

4.1 Regional importance of marine environment

As part of the consultation, each coastal RDA was asked to value the importance of the marine environment in relation its economic investment, regeneration and sustainable development objectives. Table 3 below gives these scores (0 = not important at all; 5 = critically important).

Table 3 RDAs Valuation of the Importance of the Marine Environment

RDA	NWDA	One North East	Yorkshire Forward	EMDA	EEDA	LDA	SEEDA	SWRDA
Marine Environment Importance	4	2	2-3	2	4.5	3	5	5

The table shows that RDAs recognise the importance of the marine environment in terms of economic investment. SEEDA and SWRDA in particular have been involved in a number of projects in the marine environment (discussed in this section and Section 5), and the inferred importance of the marine environment is reflected in the table above. Despite the value of the marine environment attributed to the economic return and marine project activity undertaken by each RDA, there are very few policies and strategies in place which afford any protection of the marine environment. Only SEEDA has a policy within the RES that affords the protection of natural resources which includes marine resources. All other RDAs have strategies and policies that relate to some degree to coastal and marine activities, but these are mainly for commercial purposes, regeneration or economic gain.

4.2 Marine component of RDA strategies

4.2.1 North West Regional Development Agency

The marine industry as a whole is of major economic importance in the North West with Liverpool being a maritime commerce centre second only to London (Caroline Salthouse, North West

Coastal Forum pers. com. 2005) and, reflecting this, the NWDA has produced a number of key documents and has developed a marine policy within the Regional Economic Strategy (RES) (NWDA 2003[a]). The RES policy promotes the accelerated development of potential growth clusters, of which one is the maritime cluster, but it makes no direct reference to sustainable development. The NWDA has prepared a '*North West Maritime Strategy*', the primary focus of which is business and economic growth rather than sustainability. It is supported by the NWDA '*Environment Action Plan*'. This refers to the sustainable development of all clusters, of which one is the Maritime cluster. The NWDA has also produced a '*Natural Economy Programme'* which seeks to maximise the economic benefit from the region's natural environment assets, which would include coastal environments.

In NWDA's, '*Action for Sustainability*' guidance document (NWDA 2004) on sustainable development, no particular policy or guidance is made for the marine environment. The guidance does, however, encourage the, "*Improvement of inland and coastal* waters", a strategy taken from guidance given by the EA's '*Vision for our Environment: Making it Happen*' (EA 2005). Biodiversity and Landscape is one of the priority sectors in the NWDA's sustainability strategy and refers to coastal plains when describing the region's varied and diverse landscapes.

A '*New Vision for Coastal Resorts*' (NWDA 2003[b]) has been produced by the NWDA to be used as a framework for attracting funding to invest and regenerate 12 coastal resorts within the region. The document sets out underlying principles for improvement and those with direct relevance to the sustainability of the marine environment include improving water quality and beache cleanliness to attract bathers.

The '*Strategy for Maritime North West*', mentioned above attempted to encourage sustainable development but it was not widely consulted upon and has been criticised from several different quarters, not just environmental, for not engaging wider stakeholders. Since the strategy was published the NWDA has made strong efforts to engage with wider stakeholders, e.g. the North West Coastal Forum and organisations such as the Royal Yachting Association, to involve them in the ongoing development of the action plans arising from the Strategy (Caroline Salthouse North West Coastal Forum, pers. com. 2005).

4.2.2 One North East

The North East values the marine environment for its potential for offshore energy and coastal tourism. This is evident with the production of a business plan for the offshore cluster, embracing the offshore, marine and energy industries in the Region. In addition One North East established the Centre of Excellence of New and Renewable Energy (NaREC) which is one of the five Centres of Excellence set up as part of the '*Strategy for Success*' programme for developing emerging new technologies. A major focus of the programme is offshore wind, tidal and wave energy.

The '*North East Tourism Strategy 2005-2010*' (One North East 2004) includes a series of actions for improving tourism in the region. The actions that influence the marine environment include influencing planning in coastal areas with a tourism perspective to ensure the development and implementation of visitor management plans for protected areas and attractions. One of the key objectives of the strategy that directly relates to the marine environment is to enhance and conserve the region's natural heritage and cultural assets with a focus on the countryside and coast. Under the Planning and Environment section, reference is made to ensuring the conservation of protected areas but there is no specific mention of the marine environment. One North East will be developing tourism activity through bodies like the sub-regional partnerships that invest in projects that have relevance to the coast (Richard Hall, English Nature pers. com. 2005). An example is the development of sustainable tourism on the Northumberland Coast.

The RES refers to creating and enhancing the environment through regeneration that will concentrate on protecting and enhancing the natural and built environment. There is, however, no reference made to the coastal or marine environment.

There are linkages between the RES and the marine environment such as transport issues and ports and through this it is interested in 'environment-led regeneration', leading to its involvement in the North East Sustainability Project. This is looking at ways of delivering the region's environmental priorities (which will include maritime issues) whilst also delivering economic and social benefits.

The '*Northern Way*' (a pan-regional ODPM-led initiative to drive economic development in the NW, NE and Yorkshire and Humberside) also affords links to the coast, in as far as there is a growing interest in the concept of 'green infrastructure'. This is essentially a well managed network of public and private greenspaces, which again could include the coast. It is too early to say yet how this concept will be taken forward through the Northern Way (Richard Hall, English Nature pers. com. 2005).

4.2.3 Yorkshire Forward

The marine environment is not high on the list of priorities of Yorkshire Forward and this is emphasised in the lack of policies relating to the sustainable development of the marine environment. Reference is made, however, to climate change and flood risk within the RES (Yorkshire Forward 2003) but this is a very limited association with the marine environment. Yorkshire Forward's sustainable development policy refers to general environmental policies including supporting the prevention of pollution and ensuring that its activities comply with legislation.

The fisheries industry is, however, regarded as an important economic cluster in the region but there are no specific policies relating to the sustainable development of fisheries or the marine environment on which it depends. Despite the lack of policies relating to the fisheries sector, Yorkshire Forward does nevertheless understand the need for sustainability within the fishing industry and this is reflected in the type of fisheries projects the RDA has funded (see Section 5.1). Marine industries and coastal tourism does not form an important part of the region's economy hence there are no coastal or marine related business clusters or subsequent strategies or policies that relate to the sustainable development of the marine environment.

Although there are no policies in the documents, Yorkshire Forward values the importance of the coastal environment, stating that the "*stunning and diverse coastline is part of the region's distinctiveness and a key selling point that needs to be nurtured and utilised*". With a fifth of the population living in rural areas, which forms 80% of the region's geographical area, Yorkshire Forward also values the importance of investing in coastal towns in rural areas. The region also values trade with EU countries and mentions the importance of the Humber Ports for providing trade links across the North Sea which are "*vital to many businesses, and the region needs to prepare for increased competition and trading opportunities as the EU enlarges*" (Yorkshire Forward 2003).

4.2.4 East Midlands Development Agency

Tourism is the only marine-related economic driver in the region that is represented by a strategy or policy for sustainable development. Marine industries are not an important economic driver in the region and there are no business clusters related to the marine or coastal environment. The region's '*Tourism Strategy*' sets out a vision whereby tourism will play a greater role in the future prosperity of the region and that an important factor in reaching this vision will be "*treasuring the*

coastline as an economic resource" (EMDA 2003). The vision within the strategy also states that the "*conservation and improvement of natural habitats will have created wildlife destinations of top quality*". The '*Tourism Strategy*' includes a small section on "*Caring for the Coast*" in which it is stated that the Lincolnshire coastal resorts account for a large proportion of the region's tourism and are an important recreational resource for the region's population. Important coastal recreational activities within the region include bird-watching on the Wash, and bird- and seal-watching on the Lincolnshire coast. The strategy states that there is the opportunity to diversify the tourism on offer on the coast, attracting a more diverse group of people, based on the natural and wildlife assets.

4.2.5 East of England Development Agency

Energy is one of the main business clusters in the East of England, within which the renewable energy sector has a major focus on offshore wind energy. Renewables East was established to help the region meet its renewable energy targets whilst ensuring the area gains the widest economic benefit.

The marine or coastal environment is highly valued by EEDA but this is not reflected in the RES (EEDA 2004) or other strategies as there are no policies affording protection or setting out plans for sustainable development of the marine environment. There are '*Regional Tourism Strategies*' and '*Action Plans*' but there is no reference to the marine environment. The most relevant policy document in the East of England is the EEDA '*Environmental Policy*', which states that "*maintaining and enhancing the quality of the natural and built environment is an essential component of sustainable development and is vital to safeguarding and improving the quality of life in the East*". The main priorities within the policy however, are directed at sound environmental practices within businesses operating in the region. No mention is given to the marine or coastal environment and policies are confined to general environmental issues relating to businesses and industry, i.e. air emissions, contaminated land etc.

4.2.6 London Development Agency

The '*Mayor's London Plan*' is the LDA's RES (LDA 2004[a]) and, while it makes no reference to the marine environment, it includes a policy on the Blue Ribbon Network, which covers the role of the River Thames (Lesley Harding LDA pers. com. 2005). The LDA has produced an '*Economic Development Strategy*' (LDA 2001) which originally afforded the protection and enhancement of the biodiversity of London's land and marine environments. The latest version, however, published in 2004, no longer makes any reference to the marine environment.

While the LDA does not have a coastline, the Thames estuary is essentially a marine system and has a huge influence on the adjacent marine environment of the North Sea. Development along the banks of the estuary, wastewater and sewage run-off, and shipping are all major issues for the Thames. The Thames is perceived by the LDA as a major asset to the city of London offering a significant contribution to London's success (LDA Economic Development Strategy (EDS) 2004[a]). The Thames Estuary was the catalyst to the development of London as a major conurbation and performs a landscape, transport, identity, environmental and historic heritage role for London. However, with the decline of the docks, the direct economic role of the estuary has declined (Lesley Harding pers. com. 2005). There is a recognition that the river is currently an underused asset (LDA 2004[a]) and more work is required to enhance the role of the river in terms of transport of people and goods, leisure and tourism (Lesley Harding pers. com. 2005). The LDA also values the Thames as a 'powerful landmark that can be used to help support regeneration and other economic development initiatives and it is an important wildlife site and natural landscape feature in its own right' (LDA 2004[a]). The LDA is proud of the Thames and

believes it is one of the 'cleanest rivers in the World where there has been ongoing improvement in water quality' (LDA 2004[a]). Despite these values, there are no policies within any strategies by the LDA that provide for sustainable development of the River Thames itself, although significant investment and regeneration is being implemented for the Thames Gateway redevelopment. The LDA is currently developing a '*Sustainability Business Plan*' which includes a role in delivering area regeneration, a major focus of which is the Thames Gateway which includes issues concerning managing flood risk.

4.2.7 South West Regional Development Agency

SWRDA defines its region as "*the maritime region of the UK*" with more than 700 miles of coastline, where no location is ever more than 50 miles from the sea. The RES for the South West (SWRDA 2003[a]) recognises the physical environment as "*a great strength and economic asset*" that underpins the success of tourism, culture, marine and other sectors. In 1999 the environment sector generated £744 million in output and 55,000 jobs.

The marine and coastal environment is a highly valued asset within the South West, providing a significant proportion of economic resources for the region. Fishing, for example, alongside agriculture and forestry, is highly dependent on the environment. Together these generate £1.6 billion in Gross Domestic Product (GDP) and generate many more jobs indirectly (SWRDA 2003[a]). The environment is a crucial asset for other economic sectors such as tourism. It is estimated that most holiday trips to the region (78%) are motivated by the conserved landscape. The presence of these visitors has a positive effect on other sectors, such as culture, which contributes £1 billion to the regional economy (SWRDA 2003[a]). Furthermore, by employing 85,420 full time equivalents (SWRES 2003), it is clear that tourism can be recognised as a priority sector.

The value offered to the marine and coastal environment by SWRDA is reflected in the RES, which identifies the '*marine sector*' as one of the five economically important sectors that are strategically important to the region and offer the potential for significant growth into the future. Combined they support approximately 30% of the region's GDP and nearly 25% of total employment (SWRDA 2003[a]).

There is no defined strategy for the marine environment but the SWRDA has ensured the marine environment is integrated into all other relevant strategies as agreed by regional partners during the production of a '*South West Coastal Prospectus*' (see below). Besides the RES, other relevant strategies developed by the SWRDA that make reference to the marine and coastal environment include:

- *Regional Renewable Energy Strategy* (SWRDA 2003[b]);
- *Sustainable Farming and Food Strategy* (SWCoRE 2003);
- *Market and Coastal Towns Initiative* (SWRDA 2005);
- *Marine Sector Strategy* (SWRDA 2004);
- *Regional Gateways Strategy*.

Marine industries play a small but important role in the region. The '*South West Economic State of the Region Report 2002*' states that 'Marine Technologies' employ over 10,000 people with over 2,000 new jobs being created in Devon since 1995 (DTZ Pieda Consulting 2002). Marine industries are highly valued as an economic driver within the South West; so much so, that a separate Task Force – Marine South West - was established by the RDA to increase the business competitiveness of marine sector companies in South West England. The company is supported by a group of public sector bodies which includes the SWRDA, GO for the South West,

South West Tourism, and trade associations such as the British Marine Federation and the Engineering Employer's Federation. The group claims that by 2010, the Marine industry sector in the South West will be regarded as the most competitive, innovative and coherent industry across Europe. Their strategy makes no reference however, to sustainable development or the conservation of the marine environment.

SWRDA has produced a guidance document directly related to the sustainable development of the coastal and marine environment entitled, '*South West Coast: A prospectus for the Future*'. The publication outlines the value of the region's coastal and marine resources and sets the context for a regional approach to coastal management in the South West. The guidance lists all the different organisations involved in coastal management of the region, including an overview of regional marine and coastal strategic issues and an action plan for each. These issues include fisheries, tourism, climate change, coastal defence, marine economic development and coastal regeneration. A coastal vision for the future is also given along with a list of the existing regional and coastal strategies and guidance notes. Despite this good intention, SWRDA has, however, failed to take the proposals forward (Roger Covey English Nature pers. com. 2005).

4.2.8 South East England Development Agency

There are eight key sector groups that have been identified by SEEDA as the main economic drivers of the region. Three of these are marine related, including Marine Industries (and marine leisure services), Tourism and Environmental Technologies.

The marine industry is one of the leading economic drivers in the South East. There is a broad variety of significant marine market segments including marine leisure, ship-building and repair, ports, oil and gas and maritime services. In 1999, SEEDA's Business & International division established the '*Marine Task Force*', as a vehicle for business to influence regional policy affecting the sector and to implement programmes to tackle sector issues. The Task Force operates as a voluntary group of businesses in conjunction with SEEDA and has been at the forefront of driving marine technology within the South East.

SEEDA values the important contribution that shipping makes to the South East economy stating that the region is gateway for the rest of the UK to travel to Europe. The major south Coast ports, including Dover, Southampton and Portsmouth as well as the Channel Tunnel make the South East the natural access point to mainland Europe and the rest of the world (SEEDA 2005). While SEEDA's '*Profile of the South East*' acknowledges the regions environmental resources including the 72 km of designated heritage coast in the South East, it also acknowledges that areas of the coast are deprived and not fulfilling their economic potential (SEEDA 2005).

SEEDA's '*Economic Profile*' recognises the importance of the region's marine and coastal habitats with many of the region's internationally recognised wildlife sites located in the coastal zone, including eight candidate Special Areas of Conservation covering 38,389 ha and eight Special Protection Areas for birds covering 32,584 ha. SEEDA also recognises that the pressure on priority wildlife habitats, especially coastal grazing marsh, saltmarsh and intertidal mud, is increasing as a consequence of sea level rise and development along the coastline. Other issues recognised include marine aggregate extraction and properties at risk from coastal flooding.

Environmental Technologies play a small role in the region's economy. Research commissioned by SEEDA has concluded that these activities collectively account for around 230,000 jobs in the South East region (5.5% of the Region's total employment), of which over a third are contributing towards a high quality environment.

SEEDA values the importance of regenerating small rural towns and set aside £7m for investment in 2004. Coastal towns make up some of the market towns included in this investment.

SEEDA is in the preliminary stages of drafting a '*Solent Maritime Economic Strategy*' for part of the South East of England (SEEDA Draft Solent Marine Economic Strategy, unpublished). The emphasis of the strategy will be on promoting economic growth of the maritime industries within the Solent area whilst at the same time enhancing the environment and biodiversity for leisure and recreation. The outputs of the study will include:

- an audit of existing maritime economy activity;
- an analysis of the regions capacity to attract further growth;
- recommendations on maximising the sustainable economic development benefits of existing activities/industries;
- a review of the likely mega trends affecting the sub-region in the next 10-20 years and an analysis of how the region could best exploit these opportunities; and
- development of a Solent Maritime Economy Strategy based on above analysis.

SEEDA is also concerned with ensuring that the strategy fits in with the current legal framework and planned future changes.

4.2.9 Regional Economic Strategy (RES)

RDAs have a responsibility for regional economic development and regeneration, which is implemented through a policy framework in each of the RDAs' RESs. The policies within the RES will drive investment, business and sustainable development within each region. A summary of the policies that have a direct and indirect influence on the marine environment are given in Table 4 and the full text of each of the policies given in Appendix B.

There are no RESs which contain policies that actively promote the conservation of the marine environment. Where marine natural resources are exploited and act as an important driver for investment within the marine economy, only SEEDA has developed a policy specifically relating to the conservation of natural (and marine) resources (see below). This is not, however, focused on biodiversity or conservation objectives, but for economic gain. Despite this, SEEDA has developed the most proactive sustainable development policy.

SEEDA's marine policy is outlined below within *Objective 5: Sustainable Use of Natural Resource*s:

1. Promote awareness and understanding of the environment as a key strength of the South East economy
2. Maintain the value of the environment as an economic asset
3. Secure investment in enhancing and restoring biodiversity, to generate better economic, environmental and social returns in the future
4. Promote and support sustainable tourism based on the quality of the natural, built and historic environment.

The SWRDA, EEDA NWDA and One North East all have policies within the RES that promote investment and development in marine industry, e.g. offshore wind or marine businesses, however little specific reference is made to sustainable development. Some of the RDAs have created general environmental sustainability policies but there is no specific mention of the marine environment or coastal environment and the policies mainly relate to ensuring business and industries adopt sustainable principles, e.g. reducing emissions.

Table 4 Marine and Coastal Related Policies in Regional Economic Strategies for each of the Coastal RDAs

RDA	Marine Policy Natural Resources	Marine policy Other	Coastal Policy General
North West		Accelerate Business Clusters development of potential growth sectors - Maritime	Promote developed leisure assets along coast e.g. golf courses.
North East		Promote offshore business sector Improve Transport Infrastructure (relates to Ports)	Promote environmental sustainability in general.
Yorkshire			(i) Investment in coastal communities (ii) Promote environmental sustainability & investment in environmental assets.
East Midlands			(i) Investment in disadvantaged areas incl. coastal communities. (ii) General policy - improvement of rural areas incl. coasts.
East of England		Promote offshore wind farms	(i) Improving supply of homes and transport in coastal communities. (ii) Investment in ports and port related developments. (iii) Safeguard character and assets of coastal areas (iii) Economic development ensuring environmental protection and enhancement.
London			(i) Further develop use of the Thames as a transport network (ii) Large scale development in the Thames Gateway (iii) General policy to maintain and improve biodiversity
South East	Sustainable Use of Natural Resources – includes marine and coastal environment		(i) Promote access improvements to ports (ii) Regenerate Brownfield sites of Kent and Sussex coasts
South West		Support development of marine business sector	(i) Development of coastal areas requires special consideration. (ii) Integrate policies from coastal prospectus.

All RDAs have developed policies that relate in some way or another to the coast, whether it be regeneration of coastal towns or investing in coastal tourism or improving the environment in general. Considering the land-sea interface between the coast and the sea, and the complex and diverse relationships occurring, all of these policies will have an indirect impact on the marine environment to some degree.

On the whole, the marine environment is regarded as an important element of the different regions' natural environment and in some regions provides resources that drive the economy (energy, tourism, fisheries, industry etc). Even where the marine environment is utilised as a marine resource providing economic gain for the region, there appears, however, to be very few specific strategies or policies that cater for the sustainable development and conservation of the marine environment.

5 RDA Marine Investment

The structure of RDA investment is summarised in section 3.2 above. This section discusses how the RDAs have invested in the marine environment in recent years, referring to the marine projects undertaken, the staff employed for responsibility of marine-related activity and the compliance of their marine activity with statutory and non-statutory marine nature conservation.

RDAs have been responsible for a number of marine-related projects, principally for commercial gain. On the whole, sustainability principles are not made a priority within RDA investment projects in the marine environment. The main focus is on improving the economy, regeneration, employment and encouraging business investment within the region. This is understandable when the main driver for the work undertaken by RDAs is a legal and administrative framework that prioritises short-term regional economic gain over sustainable development in the longer term.

With projects that involve the exploitation of natural resources for economic gain however, many of the RDAs understand the importance of sustaining the resource in order to continue extraction in the future. All activity undertaken by Yorkshire Forward in relation to fisheries is, for example, based on the principle of securing a sustainable future for the UK fishing industry whilst attempting to prevent damage to the marine environment.

There is no formal internal system within any of the RDAs that identifies any marine conservation issues, and in particular statutory or non-statutory marine designations when investing in marine related projects. RDAs rely on the planning and licensing systems to ensure that marine conservation is not compromised. Projects are also internally appraised to comply with sustainability principles, but the level of detail to which this is undertaken is not known. Currently the appraisal system does not make 'sustainability' a priority and often environmental issues are frequently overlooked in favour of economic gain. In addition, the sustainability appraisal system was not developed and put in process until 2004 (Susan Stewart, One North East, pers. com. 2005), so all marine projects before 2004 were not scrutinised for sustainable components. At the workshops for the action plans of Sail North West and Seafood North West projects, for example, the need for the plans to incorporate sustainable development principles was not discussed at all (Caroline Salthouse, North West Coastal Forum pers. com. 2005).

5.1 Marine projects

Although RDAs have been responsible for a number of marine projects across the country, the projects undertaken by RDAs to specifically focus on the sustainable development of the marine environment are minimal. The majority of the marine projects have been implemented solely for economic gain, either in marine industries, offshore energy or tourism, and have little concern for the marine environment. Very few of these projects could be categorised as having sustainable elements but they all will have undergone sustainability appraisals before implementation to ensure that the projects are not conflicting with Sustainable Development PSA Targets. In the South West, for example, all investment decisions have undergone a robust appraisal which incorporates the RSFD (Claire Gibson SWRDA pers. com. 2005). The only projects that apply specific sustainable development principles are those economic projects that critically depend on the sustainability of the natural resource being extracted (e.g. fisheries) in order to survive.

Table 5 Summary of Table of Main Marine Projects undertaken by RDAs

RDA	Project	Brief	Reference to Marine Environment Sustainability?
NWDA	Mersey Narrows SPA Mitigation / Compensation Study	Study to be commissioned to set out the compensation measures required for the future development on designated Special Protection Area (SPA)	No – project is required by law, to provide compensation for damage to designated sites.
NWDA	Inland and Coastal Recreational Bathing Waters Project	Co-funded NWDA and the Environment Agency – project aims to improve water quality of coastal waters	Yes
NWDA	Marine Current Turbines	NWDA co-founded the project to assist development of tidal device	Only energy reduction, not marine environment
One North East	NaREC	Centre of excellence for new and renewable energy. Working with universities and industry to fast track evaluation, feasibility studies and prototype evaluation and testing through to commercialisation.	Only energy reduction, not marine environment
One North East	Training Skippers and Engineers in the NE Fishing Industry	Provision of two 12 month training programmes for 15 new skippers and engineers.	No
Yorkshire Forward	SRB7 Humber Fishing Communities Regeneration	Funding provided for a programme of projects to develop the economic sustainability of the fishing industry.	Yes
Yorkshire Forward	Yorkshire and Humber Fishing Communities	Funding provided for a programme of projects identified as priorities to provide much needed assistance in the face of quota cuts and to secure a sustainable future for the industry.	Yes
Yorkshire Forward	Addressing Disadvantage on the Coast	Funding provided for a package of measures, aimed at improving quality, research and promoting Scarborough and Whitby as key producers of quality seafood.	Yes
EMDA	Unable to advise of any marine projects		
EEDA	Renewables East	Support and core funding for group established for renewable energy including offshore wind	No
EEDA	Offshore Renewables Centre	Business Plan and core funding provided for construction of centre to act as ahub of activity for companies, R and D and technological initiatives into renewable energy, mainly wind.	Only energy reduction, not marine environment
EEDA	East Port – Great Yarmouth – Outer Harbour Scheme	EEDA provided political support and funding for expansion of deepwater port for freight and passengers	No
LDA	East London Strategic Flood Risk Assessment	LDA had minimal involvement and present on Steering Group	Yes but little involvement of LDA
LDA	Safeguarded Wharfs	Implementing the London Plan Safeguarded Wharfs Policy by using leverage to make selected Thames wharfs viable for river based activity.	Yes
SWRDA	Invest in Fish SW	Part Funding and membership of steering group of group aimed at developing sustainable management options for South West fisheries	Yes – promotion of sustainable fisheries management
SWRDA	Wave Hub Project	Economic study and funding for offshore wave energy project	No
SWRDA	Syclla Artifical Reef	SWRDA provided funding and support for the sinking of vessel to provide artificial reef for diving tourism	Yes – contentious argument for enhanced marine environment
SEEDA	Marine South East	Core funding provided for Business-led marine sector organisation	No
SEEDA	Various waterfront regeneration projects	e.g. re-development of Rochester Riverside on the Medway, Ropetackle site at Shoreham, Woolston on the Solent, Cowes Waterfront (IoW)	No
SEEDA	Solent Marine Economy Strategy – in pipeline	Possible strategy development which would include sustainable development principles for the marine environment	Yes
SEEDA	Shoreham Fisheries Project	Funding provided by SEEDA Fisheries Regeneration Initiative for sustainable fisheries strategy	Yes

The level of RDA involvement in the different marine projects is varied, with some RDAs being responsible for the main areas of the project, including preparation, funding and delivery, while for other marine projects RDAs have a smaller role acting as facilitators or sometimes simply providing political support and promotion. A full list of marine related projects is given in Appendix C and a summary of the main marine projects undertaken by each RDA given below and illustrated in Table 5. Where appropriate, references of the projects to the environment or sustainable development has been mentioned.

Marine industry

In the South West and South East marine industry projects provide a large input to the regional economy and are supported by SEEDA and SWRDA through the Marine South West and Marine South East groups which were formed and funded by both RDAs to increase the business competitiveness of marine sector companies in the region. These initiatives play an important role in driving marine industries but do not have any marine environmental sustainability objectives.

Offshore energy

There are a number of initiatives by RDAs for the promotion of offshore energy primarily for economic gain, through provision of jobs and reductions in energy consumption. SWRDA, for example, has provided the initial funding for the Wave Hub Project which is looking to develop offshore renewable energy 10 miles off the South West coast. SWRDA commissioned an economic impact and feasibility study which concluded that the Wave Hub project could lead to the creation of up to 700 jobs and contribute £27 million a year to the economy (SWDRA Press Release 2005). Whilst this project is for future economic gain, SWRDA aims to create the world's first offshore facility for the large-scale testing of wave energy devices. Renewable energy is a sustainable energy option but the impact on the marine environment is potentially damaging unless the impacts are thoroughly investigated and mitigated.

EEDA are well advanced of other RDAs in terms of offshore energy promotion though the establishment of the regional group 'Renewables East' which is responsible for the promotion of renewable energy activities. EEDA is also funding the construction of a renewable energy centre. NWDA funded a project with Marine Current Turbines in 2003/ 04 to develop tidal current devices and to open up supply chain opportunities for regional companies. Whilst these initiatives support the sustainable development of the energy sector through reduction of energy consumption and emissions, there is little reference to the sustainability of the marine environment. The Centre for Excellence of Renewable and New Energy (NaREC) funded by One North East has similar objectives.

Coastal town regeneration and tourism

Coastal tourism projects are also afforded some investment by the different coastal RDA. Whilst often not marine projects specifically, the development of the land-sea interface by investing in coastal tourism, undoubtedly has an influence on the adjacent coastal waters. One North East, for example, plans to develop a major visitor centre in Seahouses, complete with interactive displays and workspace for local harbour businesses. The four-storey North Northumberland Interpretation Centre, is based on the theme of 'Sea, Land and Weather,' but at this stage marine environmental activities are unknown. In the South West, SWRDA was part-responsible for the Scylla Artificial Reef project, which involved the sinking of a disused Navy vessel to form an artificial habitat for recreational SCUBA diving. At the time it was argued by advocates of the project that not only would the reef offer socio-economic benefits but that it would also enhance the marine environment through the provision of hard structure on which marine organisms could settle. However, the consensus amongst nature conservation organisations was that this was not a valid argument, as the artificial habitat would not be a satisfactory substitute for (let alone an

improvement on) the natural seabed habitats destroyed by the scheme. Had conservation interests been engaged from the start, it is likely that the project would have progressed much more smoothly.

There are also significant levels of investment by different RDAs to regenerate rural coastal towns, through various waterfront development schemes. Most RDAs have some coastal town regeneration scheme, either as its own separate initiative or as part of a broader regeneration project.

Port and harbour development

NWDA commissioned a study to look into what compensation and mitigation measures would be required to invest in developing land at Seaforth Docks, Port of Liverpool, which is a Special Protection Area (SPA) and protected European site designated for birds of international importance. Whilst NWDA is being proactive over the requirement for the provision of compensatory habitat for damage to the SPA, this is a requirement by law if SPAs are damaged through development. The fact that NWDA is being proactive in planning to develop on designated conservation sites suggests there are very few if any environmental objectives within this project.

EEDA is actively promoting investment in the regional ports through providing funds for the expansion of East Port, Great Yarmouth Outer Harbour Scheme, in an attempt to provide an international gateway to Europe.

Fisheries

The marine projects funded by Yorkshire Forward focus around the fisheries industry. Their focus is on sustainability to optimise commercial gain. Understandably, fish stocks are a finite resource and they must be sustained if extraction is to continue in the future. Yorkshire Forward is currently funding the Marine Stewardship Council (MSC) certification process for several fisheries against the MSC environmental standard for sustainable fishing. In addition, funding has been secured to provide an improved basis for planning the sizes and locations of Marine Protected Areas to meet the needs of the industry and the wider community. This work will provide an ecological description of the areas to identify fragile habitats, improve understanding of biodiversity and the location of valuable species.

Similarly, SWRDA has funded a project called Invest in Fish South West an initiative aimed at developing sustainable management options for South West fisheries. Likewise, SEEDAs' Fisheries Regeneration Initiative have funded the Shoreham Fisheries Project where a fisheries development strategy has been developed using historical fishing data for sustainable management.

The only other RDA to identify involvement in fisheries projects is One North East.

5.2 RDA marine staffing

The RDAs are not currently structured in a way that warrants the need for dedicated staffing for working on the marine environment. While there are many different staff within each RDA that have some degree of responsibility for marine or coastal development, there are no staff employed specifically for sustainable development or conserving the marine environment. The positions relating to marine investment for each RDA is given in Table 6 below.

All RDAs employ teams to cater for environmental policy, advisory roles and sustainable development. Their responsibilities lie in promoting sustainable approaches for economic growth and development, but the priorities for environmental staff tend to lie primarily within promotion of environmentally sustainable business procedures, for example reduction in emissions and promotion of recycling. Staff employed within each RDA have some responsibility for natural resource management, but these are often not high on their list of priorities with the focus remaining on economic development.

Table 6 Staff within RDAs whom have a degree of responsibility marine or coastal activities and investment

RDA	Marine or Coastal Environment	Marine-related	Coastal related	Sustainable Development General	Environment General
NWDA		Maritime Cluster Manager	Renewables North West		Envirolink NW ETS Cluster Manager
One North East		Marine Oil and Gas (position vacant)			Environmental Policy Advisor
Yorkshire Forward		Development Manager (Fisheries) Seafood Cluster Manager	Head of Rural Renaissance	Head of Sustainable Development	Senior Regeneration Manager
EMDA				Environmental Sustainability Advisor	
EEDA		Renewables East	Head of Planning Regeneration	Head of Sustainable Development	Environmental Policy Advisor
LDA				Senior Urban Renaissance Planner	Environmental Policy Advisor
SWRDA		South West Marine Fisheries Sector (post to be announced)	Environment Economic Drivers Market Coastal Towns Staff		Environmental Policy Advisor
SEEDA		South East Marine – Marine Sector Co-ordinator		Head of Sustainable Development	Environmental Resource Manager

RDAs employ staff within 'cluster teams' which are created to invest in either impoverished areas of the region that require regeneration and economic investment, or in areas which have potential for economic gain. Marine-related industries in some of the regions generate a sufficient amount of investment and therefore have designated Marine Cluster Managers. The NWDA for example, employs a Maritime Cluster Manager whose role is to develop business in the marine sector. SEEDA and SWRDA have funded groups specifically set up to support marine business investment, and South East Marine and South West Marine have staff dealing with these sectors. All these roles are focused on economic investment support and there is no specific reference to sustainability of the environment. There are also staff within RDAs that are responsible for ports but again this is for development and regeneration rather than any specific activity to cater for marine sustainability.

Where fisheries are an important economic industry within the regions, e.g. in Yorkshire, there are designated staff responsible for the sustainable development of the fishing industry. This is due to the understanding that where natural resources are extracted, the stock must be maintained to ensure future sustainability. In the South West, SWRDA is proposing jointly to fund (with Defra) personnel to be responsible for fisheries in order to leverage out spending within the fisheries sector.

RDAs also have regeneration and/or rural teams that have responsibility for investment and redevelopment of impoverished towns, many of which are located in the coastal zone. For example, SEEDA employs Development Surveyors that are responsible for regeneration of coastal and waterfront brownfield sites (Andrea McCallum SEEDA pers com. 2005).

In London, the LDA has business, skills, regeneration and development teams, all of which relate in some way to Thames Estuary issues. The closest related team is the Development Policy team, where a town planning officer (Senior Urban Renaissance Planner) covers flood risk and general Environment Agency issues as part of a wider portfolio of issues (Lesley Harding, LDA pers com 2005).

5.3 Compliance with non statutory and statutory marine conservation measures

The RDAs do not have a framework or set procedure for compliance with marine conservation measures when deciding to undertake a marine-related project. At present the RDAs do not have any robust internal method that would detect the environmental constraints posed by marine statutory and non-statutory designations or sensitivity. Yorkshire Forward does maintain, however a register of environmental legislation and other information relevant to the RDA which is used when appraising projects (Angela White, Yorkshire Forward, pers. com 2005).

Most RDAs sub-contract the environmental stage of the planning process to external consultants that have the environmental expertise to pick up any marine environmental constraints. In doing so, they rely on the Environmental Impact Assessment (EIA) process to identify any non statutory or statutory marine conservation. SEEDA for example, has invested a significant amount into waterside development sites and property and has undertaken EIAs and other appropriate studies to inform the best use of those sites and properties, whilst mitigating against any negative environmental impact where possible (Simon Richardson SEEDA pers. com 2005). In general, however RDAs have the mindset of designated sites being a constraint rather than an opportunity (Roger Covey English Nature pers. com 2005). In addition, EIAs are only undertaken for large scale construction projects where the law requires an EIA to be undertaken. Smaller projects often do not require EIAs and the impact on the marine environment may be missed. In the case of the NWDA, the proposal form asks whether there are any constraints e.g. planning but they ultimately rely on the applicant's honesty and the regional planning framework. There is no specific environmental assessment of strategies or plans developed by RDAs and no measures in place to detect non-statutory or statutory marine conservation areas. The SEA Directive may redress this issue.

Another issue is the lack of recognition of the wider marine conservation picture. Ian Hepburn, Director of Regional Conservation Policy for the Wildlife Trusts in the South East noted that only designated conservation areas are picked up in the EIA process and there is no appreciation for the general conservation of the marine environment. RDAs do not have procedures in place that are designed to assess what protected marine biodiversity resources – habitats and species, both within and outside designated sites – exist in marine areas that could be affected by developments supported by the RDA This is reinforced by Roger Covey of English Nature (pers comm. 2005) who states that, "*there is little appreciation of wider issues (by RDAs) of*

sustainability in the wider marine environment, and certainly no active support for environmental improvement".

There is disparity between the regions when assessing the need for a framework which would detect designated sites and other protective measures in the pre-planning stage, as most RDAs feel that the EIA process is sufficient. SEEDA, however, feels that there is a need for an internal policy framework that would pick up these issues at a strategic level in the pre-planning stages, rather than addressing them reactively once a detailed project proposal has been formed and expectations have been established (Simon Richardson pers. com. SEEDA 2005). The fact that much of the south coast inter-tidal area is designated as Natura 2000 sites (protected under the EU Habitats and/or Birds Directives) means that SEEDA would have a greater requirement for an internal framework for marine conservation designation detection. The forthcoming designation of additional Natura 2000 sites out to 200 nautical miles from the UK coast will make this scoping activity even more important. The SEA Directive and marine spatial planning could facilitate this process in future.

The North West Coastal Forum believes that there is an impression among RDAs that marine designations are not considered legitimate reasons or strong enough to stand in the way of economic development, thereby increasing the risk of money being expended on schemes that are actually very likely to fail, particularly in light of the Dibden Bay decision. Plans to develop a large port at Dibden Bay were eventually rejected due to the potential environmental impact of the port development on international designated nature conservation areas. A more robust risk appraisal process for investment would possibly reduce this wastage and focus investment decisions on more feasible and sustainable schemes (Caroline Salthouse pers. com. 2005).

6 Critique of RDA involvement in the Marine Environment

The list of RDA marine related projects in Table 5 and the full list in Appendix C shows that most RDAs are active in developing marine-related projects. However, despite some reference to sustainable development, the projects are commercially focussed and sustainability is given a lower profile than the economic gain of the project. This is understandable because the framework and drivers which guide RDAs restrict them from applying sustainable development principles to investments within the marine environment. Consultation with the RDAs identified a number of key constraints which deter RDAs from investing in marine environmental projects with sustainable priorities and these are given in order of priority below:

- The current legal and administrative framework within which RDAs work is driven by economic gain and regeneration to improve the economy and employment, which often conflicts with environmental issues;
- Lack of marine strategy or marine legislation and therefore little incentive for marine conservation;
- No guidance or clarity of role for RDAs in the sustainable development of the marine environment and therefore limited understanding of what level of involvement RDAs should have in marine projects;
- Limited co-ordination and poor stakeholder engagement constraining marine environmental projects to be taken forward;
- Lack of financial incentive for sustainable marine projects;
- Lack of marine expertise;
- A lack of awareness that the sustainability of the marine environment underpins any marine investment projects.

There are some positive drivers, but the weaknesses in the legal and administrative policy framework are greater than the strengths.

6.1 Weaknesses in the legal and administrative policy framework

The following section summarises the key weaknesses in the current administrative system as identified by consultees.

6.1.1 Lack of suitable legal planning framework

SEEDA states that the main constraint to investing in the marine environment is that the legal framework for planning in the marine environment does not exist and there is no role for RDAs within this. Town and Country Planning legislation does not extend into the sub-tidal area and therefore the legal and administrative framework is not sufficient to ensure that development in the marine environment is sustainable (Simon Richardson SEEDA, pers. com. 2005).

The lack of statutory remit for RDAs to consider marine planning beyond the low water mark means there is very little incentive to invest in marine projects, unless they are for commercial gain. Caroline Salthouse of the North West Coastal Forum explained that at present, because

there is no marine spatial planning framework, it is very difficult for RDAs to have an incentive for sustainable development investment in the marine environment.

The problem is not confined to sub-tidal waters as there is also a lack of statutory remit for RDAs to consider coastal flood risk in investment decisions, this role is restricted to the Environment Agency. This is a problem in the East and South East of England where coastal erosion and flood risk to property and businesses is a major issue, e.g. at Happisburgh on the east coast and the Thames Gateway. EEDA is often consulted on these issues but is unable to provide advice on sensitive issues such as compensation for loss of land, for example (Paul Hinds EEDA, pers. com. 2005).

In addition, the current legal planning system that affords protection for nature conservation is often seen as a constraint to RDA investment rather than an opportunity. The coast is a heavily utilised resource and there is often much conflict of land use. Often, particularly on the South coast, investment plans are rejected due to the inflexibility of the Habitats Regulations making it extremely difficult to identify options for compensatory habitat creation if designated sites are to be affected. This is a particular issue in the SE where there is considerable pressure for coastal/waterside development and a large percentage of the coastline is covered by Natura 2000 designations (Simon Richardson SEEDA, pers. com. 2005). Therefore marine nature conservation issues are often seen as a constraint and barrier to development plans, which can create an automatic negative feeling towards designated areas.

The proposed Marine Bill may act as a remedy for this providing the encouragement for RDAs to be more concerned with the protection of marine resources (Ian Hepburn, The Wildlife Trusts, pers. com. 2005). But currently there is little incentive for RDAs to produce a coherent regional strategy for the marine environment, let alone bringing in sustainability issues (Roger Covey, English Nature, pers. com. 2005). Only where marine industries play a significant role in driving the economy of a region are RDAs looking to produce marine economic strategies.

However in London, the level of investment from the LDA in the marine environment is not significantly limited or enabled by the legal framework. The bigger issue is the strategic priorities given to the LDA through the Mayor of London, GO London, Department of Trade and Industry (DTI), the rest of government and Londoners themselves (Lesley Harding LDA, pers com. 2005). These strategic priorities are most often economically driven.

6.1.2 Economic incentive

On the whole, RDAs focus on investing in projects that will be successful in creating employment and improving the economy through business. Therefore, the level of reference towards sustaining the marine environment within the economic strategies, policies and guidance for different regions is very limited across the country. In regions where the marine or coastal environment plays a role in driving the economy, there are more strategies and policies geared towards driving investment in the marine environment. For example, within regions where coastal tourism provides jobs and boost the economy, significant investment and regeneration is offered along with individual tourism strategies often produced. Another example is the marine business group Marine South West, which was established and funded by SWRDA to cater for the development needs of the marine industry sector rather than sustainability (Roger Covey English Nature pers. com. 2005).

Therefore, where RDAs value the marine or coastal environment in terms of producing economic returns for the region, strategies and policies are often in place to drive investment. Where RDAs perceive there to be little economic gain from investing in the marine environment, the reference to its protection in strategies is extremely limited. However in the South East, where marine industry plays a vital role in the regional economy, strategies and their associated policies are concerned with the sustainable development of the marine environment. Nonetheless, the

importance of protection for the coast or sea - and the benefits to marine industries from a thriving environment with healthy natural resources - is often under-appreciated.

The problem associated with economy-driven project incentives is highlighted by the LDA, which states that, "*Investment in the marine environment (that is, the Thames Estuary) is probably below the ideal level of investment, as a whole, because it competes with many other worthy investment options*". Understandably, most RDAs are reluctant to develop marine sustainable strategies because at present they perceive a greater need to develop a number of other policy areas, according to the priority work areas that are assigned by each of their published Corporate Plan and RESs (Angela White, Yorkshire Forward, pers. Com. 2005).

The nature of the RDAs' work to support and develop economies potentially presents many challenges to finding the appropriate balance between economic development and environmental protection and enhancement. An example would be in relation to port development, such as the Associated British Ports (ABP) proposals to develop Dibden Bay on Southampton Water to expand the Port of Southampton (mentioned previously). SEEDA did not have a specific marine economy or marine environment strategy to enable it to take a policy stance on whether or not to support the proposal. SEEDA maintained a neutral position but it became clear that there was a strong expectation from stakeholders that SEEDA should adopt a pro-active position one way or another. A clear strategy or policy position would help all parties in this sort of scenario as it would help SEEDA target action and funding towards sustainable use and protection of the marine environment (Simon Richardson, SEEDA pers. com. 2005).

6.1.3 Lack of adequate guidance on RDA role in the marine environment

EEDA explained that RDAs do not have adequate guidance on their role and responsibility for marine environmental issues. For example, they are often approached for coastal erosion, flooding and vulnerability projects but they have been unable to comment because they do not have any guidance on how to deal with these issues nor understand their responsibility or role in the subject matter. The lack of guidance or clarity of their role for the sustainable development of the marine environment makes investment difficult. This is also linked with a lack of marine environmental expertise.

The lack of guidance for RDAs makes it very unclear as to what level of involvement they should have in regional marine projects in relation to other marine and coastal stakeholders. Investment in the Thames Gateway should not be made the responsibility of just one or even just a handful of organisations, but instead it needs to be a shared priority within the wider strategic approach to the Thames Gateway (Lesley Harding, LDA pers. com. 2005).

6.1.4 Lack of co-ordination and stakeholder engagement

There are several sector groups employed by RDAs that have shared responsibility for marine-related activity and investment. These include marine industry or cluster teams, planning teams, sustainable development teams, rural teams (coastal), regeneration teams (coastal) and environmental teams. It has become apparent during the consultation process of this project, that there is little communication between these teams within the RDA on issues affecting the marine environment. For example the NWDA is split, not just into industry clusters, but also geographically which makes communication with appropriate staff difficult. This also creates problems when applying for funding for projects that have a wider geographical remit outside one region, which any marine-based project may do (Caroline Salthouse North West Coastal Forum pers. com. 2005).

Another issue which is a traditional problem with many projects in the marine environment is the lack of engagement of other stakeholder groups. This is mainly due to the complex nature of the coastal area and multi-resource use which often creates conflict between users groups and interested parties. For example, nature conservation groups, which may have concerns over a marine related development, are often left out of pre-planning discussions and investment decisions, which lead to poor relationships. This lack of co-ordination and unwillingness to involve other stakeholders can lead to the implementation of marine projects with poor environmental components (Roger Covey, English Nature pers. com. 2005).

There is also an issue when some marine and coastal stakeholders do not want to engage in any plans or discussion for marine-related projects that may affect their land or property. This has been highlighted by problems with the Ministry of Defence (MoD) which is often very difficult to engage. For example, in places where MoD land is located on the coast, it is often underused and not contributing to the economy of the local community, but holds opportunities to undertake sustainable projects, for example managed realignment in response to sea-level rise. Defra states that it has not seen any move by RDAs to attempt to address this issue with the MoD (Jayne Boys, Defra, pers. com. 2005).

6.1.5 Lack of funding

The lack of funding for regions to invest in sustainable marine projects is another major issue. There is no centralised funding afforded for use by the regions for the sustainable development of the marine environment. Instead, RDAs have funding pots for economic investments, regeneration and employment gain. Current targets towards cost benefit analysis skew funding heavily towards more traditional, easily measured benefits such as job creation, new industries etc, rather than looking at the more difficult to measure maintenance of environmental quality (Roger Covey, English Nature pers. com. 2005).

The lack of funds for marine activities not only deters investment in marine sustainable projects but also from paying for the additional cost of ensuring marine projects have sustainable components. For example, in the Northwest there is a ‘natural economy’ aspect of the RES and an attempt, through an NWDA-led partnership steering group, to develop environmental projects which have economic and social benefits, but other than a co-ordination role and seminars for project providers on how to write funding bids, no RDA funding appears to be forthcoming to take these projects forward (Caroline Salthouse, North West Coastal Forum pers. com. 2005). In addition all the projects are land-based and not marine related.

Although some RDAs provide funding and support for maritime business through its business cluster groups, and also often promote tourism and encourage appropriate regeneration in coastal towns, there seems to be little recognition of the links and conflicts between the two areas being funded, and the wider issues and often international responsibilities regarding sensitive management of the marine environment (Caroline Salthouse North West Coastal Forum pers. com. 2005). Certainly RDAs at best seek to limit their impact on the marine environment, but do not direct much funding to improvement (Roger Covey, English Nature, pers. com. 2005).

A major constraint to investing in marine environmental projects is the short-term investment and funding initiatives that guide the work of RDAs. The Corporate Plan provides an administrative framework within which the RDAs work and guides the type and level of investments in the region. The Corporate Plan only has a lifespan of three years which acts as a major constraint to investment projects for the marine environment which ideally should have long term lifespan if they are to be sustainable (Paul Hinds, EEDA, pers. com. 2005).

6.1.6 Lack of internal marine environmental expertise

The lack of a marine remit and supporting guidance results in a lack of internal expertise on marine sustainability issues. As discussed above, RDAs are driven by their statutory remit which makes little reference to marine environmental issues. Therefore there is little investment in developing marine expertise within the organisations (Table 6). Marine related staff are only employed to cater for marine activities if RDAs are currently investing in marine activity for economic gain or benefit to the region in term of employment or regeneration. Therefore there is little knowledge or marine environmental awareness or expertise with the RDAs to understand the complex issues involved in sustainable development of the marine environment.

6.1.7 Lack of awareness

The lack of expertise directly results in a lack of awareness by RDAs of just how critical the marine environment is in providing a core base on which to build marine and coastal–related investments.

English Nature believe that RDAs should have involvement in marine related projects, but need to recognise that the quality of the environment underpins most of the economic activity associated with the sea, from, tourism, recreation, marine industry, coastal flooding, fishing (commercial and recreational) to yachting. The environment is a key part of the infrastructure, but is awarded very little funding or recognition for sustainable development and therefore there is little awareness of its importance. (Roger Covey, English Nature, pers. com. 2005). If RDAs are to develop marine sustainable development strategies there needs to be marine environmental knowledge and intellectual capability within RDAs.

Most RDAs undervalue the importance of protection the marine environment, whether it be through water quality or marine ecosystems, but there also appears to be a lack of recognition of the socio-economic benefits of investment in the marine environment. If RDAs were made aware of the potential economic benefits of investing in the sustainable development of the marine environment over the long-term, they would be more likely to invest in its conservation.

RDAs also appear to have very limited understanding of the proposed future changes to adopt a marine spatial planning system on a regional level scale which will undoubtedly call for a greater role for regional government. This is evident from Table 7 below where each RDA was asked to rank the organisation's understanding of marine spatial planning based on the Regional Seas approach, (0 – no understanding, 5 – full understanding).

Table 7 RDA understanding of proposed marine spatial planning system on a regional sea level

RDA	NWDA	One North East	Yorkshire Forward	EMDA	EEDA	LDA	SEEDA	SWRDA
Understanding of Marine Spatial Planning (0-5)	2	1	0	1	0-1	1	2	0

At present there is very little understanding of the marine spatial planning system proposed in RMNC (JNCC 2004). If marine spatial planning is to be adopted, RDAs are likely to have more involvement in guiding marine projects and therefore there needs to be an increased level of capacity building in order for them to meet the new responsibilities. In the South West, the South West Regional Assembly has started to understand the importance of marine spatial planning and how it relates to the coastal zone planning system, including planning for long term change necessary for coastal erosion. However, the RDA has shown little understanding, and certainly failed to appreciate the potential benefits of better planning (Roger Covey English Nature pers. com. 2005).

The North West Coastal Forum explained that marine spatial planning has more of a role for the Regional Assemblies; however RDAs could engage more with coastal fora and develop a better understanding of ICZM and marine environmental management. They could also ensure any projects supported by the RDA and affecting the coastal zone take into account the principles of sustainable development and ICZM (Caroline Salthouse North West Coastal Forum pers. com. 2005).

6.2 Strengths and opportunities in the legal and administrative policy framework

The consultation did not identify any strengths in the current system. However there are some opportunities which are recognised below.

As stated above there are many weaknesses in the current policy framework constraining RDAs to investing in the sustainable development of the marine environment. Despite this, as part of RDAs appraisal process, projects funded by RDAs are required to take sustainable development principles into consideration. For example all activity undertaken in relation to fisheries by Yorkshire Forward has been based on the principle of securing a sustainable future for the UK fishing industry without causing damage to the marine environment. However, these sustainable principles have been implemented as a priority primarily as they provide long-term economic gains. There is an opportunity to increase the level of priority afforded to sustainable development in the marine environment.

On the whole RDAs recognise the importance of the marine environment. As such most are concerned with their impact on the marine environment and often participate in environmental groups that promote conservation. For example, One North East is a member of the regional environment and biodiversity fora. These fora are concerned with coastal issues and, in the case of the biodiversity forum, is looking to develop a maritime group. English Nature suggests that they would wish to utilise these groups to engage RDAs in marine nature conservation projects in the future (Richard Hall, English Nature, pers com 2005).

Another opportunity is the power that RDAs hold when it comes to planning in coastal areas. RDAs have powers for Compulsory Purchase Order actions and the capacity for land acquisition and development leverage is important in implementing large scale developments specifically in sensitive areas or risk areas such as tidal or fluvial floodplains. RDAs could use this power in combination with other sustainable approaches to undertake more sustainable coastal and marine projects in the coastal areas prone to flooding, e.g. incorporating flood proof design into projects.

RDAs are responsible for funding and commissioning projects on a regional scale and therefore have a great role to play in the development future of marine projects with sustainable development priorities. (what does this point link to?)

With the proposed development of marine spatial planning in the near future, there is a need to ensure that the role that RDAs undertake on land under the Regional Spatial Strategies, is in some way integrated with the equivalent function in the marine environment. Currently RDAs work within regional planning guidance and local authority development plans which set out the long-term spatial planning context for the region and this includes marine and coastal areas down to the low water mark. The future management and planning structure for marine spatial planning at the Regional Seas level – including the nature of the responsible planning agency or body - is not currently decided. However, there may be implications for RDAs, for example in integrating regional planning and investment across the land-sea interface.

7 Horizon Scanning

This chapter seeks to identify how potential future changes in marine-related activities and the management framework could impact on marine investment activity on a regional level and subsequent impacts on the marine environment. The chapter provides the outcome of a brief horizon scanning of the subject and also draws upon a larger horizon scanning project on marine and coastal activities undertaken by Atkins for the Environment Agency (Atkins 2004[b]).

The proposed changes to how the marine environment is managed are likely to affect the role and responsibility of RDAs in the future. Defra has highlighted that there is likely to be an increased role for regional government with the forthcoming Marine Bill with marine spatial planning intended to be implemented on a Regional Seas scale. There is also likely to be increased protection for marine nature conservation through the proposed Marine Bill and any marine-related activities will need to ensure natural resources are not compromised and that sustainable development principles are adhered to when investing in the marine environment. Marine nature conservation objectives may become components of the Corporate Plans and policies created in future RESs.

The Strategic Environmental Assessment Directive is in its initial stages of implementation and it is understood at this time that SEA will not be required for RESs that do not have specific options and outcomes. However, it is anticipated that the changing management structure of the marine environment will encourage environmental impacts to be appraised at both strategic and project level and cumulative impacts taken into account. Therefore it is anticipated that RDAs will need to become more aware and proactive in mitigating for the impacts of investment programmes on the marine environment.

The current system of appraising projects for sustainable development principles could be improved so that sustainable development principles are given greater priority in investment decisions. In addition, the sustainable development targets within the Tasking PSA Framework could be increased to take account of specific marine environmental objectives.

Ultimately, RDAs will always be investment led, where improving the economy of the region is the key driver. However, the future system will be more focused on sustainable development and there will be improved marine management to protect nature conservation in place to which all RDAs will have to adhere to.

The following section briefly highlights the current state of the key marine-related activity sectors and identifies the likely future changes and the potential impacts on the marine environment.

7.1.1 Tourism and coastal town regeneration

The tourism industry is socially and economically important to the UK and the coast in particular has been a popular destination for British holidaymakers of all age groups. The following statistics indicate the importance of coastal areas for the population of the UK:

- 75% of the UK population lives within 50 km of the coast and around 16.9 million people, about a third of the population, live within 10 km of the coast (ABI, undated, cited in Atkins 2004 [b]).
- The average population density for coasts of the British Isles is 241 people per square kilometre and rising (Atkins, 2004 [b]).
- 50% of the 7.2 million population of north-west England live in coastal settlements (Atkins,2004 [b]).

From large traditional seaside resorts to small-scale coastal attractions, this sector makes an important contribution to the local, regional and national character of the coast. Devon, for example, receives 3.5 million visitors a year – 80% of these in coastal areas and Blackpool attracts 17 million visitors/year (Atlantic Living Coastlines, 2000, cited in Atkins 2004 [b]).

Despite, the economic, social and environmental value of coastal and rural areas, coastal towns have suffered from depopulation and a lack of investment in the past with many people migrating to larger cities inland in search of improved livelihoods and income. Holiday makers also turned their back on the seaside resorts of England in search of warmer climes.

As such, most RDAs are applying a significant level of investment into the regeneration of coastal towns. In more recent times, waterfront developments have become an important component of urban renewal in some coastal communities. SEEDA in particular is investing a large amount of funds into regeneration of waterfront properties and areas. Coastal tourism is afforded a significant level of investment and regeneration by RDAs. There are many activities undertaken by tourists along the coast, mainly informal activities. These can be land based, such as bird watching and sand buggying, or water based, such as kite-surfing, jet skiing, and swimming; which makes levels of uptake and participation difficult to quantify. Regeneration of tourist centres and attractions that drive the economy are the primary focus of RDAs. Examples of these are the Scylla Artificial Reef for diving recreation supported by SWRDA and the coastal resort regeneration initiatives such as those at Blackpool undertaken by NWDA.

Many people are now returning to coastal towns in search of a less stressful and better quality of life. Significant regeneration by RDAs for coastal towns has been a key driver for the increase in the number of people moving to the coast. Alongside the regeneration of coastal towns, there has been increased need for improvements to coastal defences in response to sea level rise.

Future changes

Most of the RDAs with coastlines have developed policies within their 10 year RES, to apply significant investment into rural and coastal towns to attract tourists and businesses to the area. It is likely that in all regions there will be increased coastal activity, with towns developed with improved infrastructure, more attractions for tourists and a greater number of people present.

Regeneration of coastal towns in the future is likely to bring about a number of changes (UK CEED 2000, cited in Atkins 2004 [b]):

- Increase in waterfront developments - There are likely to be a greater number of new developments, whether it be housing developments, seaside resorts, attractions or industrial development.

- Increased needs for land based support facilities - For example, in the Thames the development of a desalination plant has been discussed to meet the ever increasing demands for water. This will result in greater pressure for development of the coastline.

- Increased need for physical accessibility - There is likely to be need for increased transport links to the coast through provision of improved road and rail networks. There will also be increased urbanisation of the coastal area to cater for the regeneration.

The future developments of the coast will conflict with climate change. As a result of global warming sea levels are predicted to rise around 0.6-1m metres along the UK coast during the next century. This change is likely to cause significant problems of increased flooding through both sea level rise and the likely increase in storminess and increased winter rainfall. This will

increase flood and coastal erosion risk to coastal communities and will result in a significant increase in demand for coastal defence. Several RDAs, for example EEDA, have undertaken studies to assess how the region's coast will adapt to climate change.

The future changes forthcoming from the Haskins Review may involve changes to coastal tourism/recreation initiatives in relation to the sustainable use of coastal floodplains. However these future changes are difficult to predict until the findings of the current Rural Delivery Framework exercise is completed in December 2005. However in remote or rural coasts where agriculture takes place, e.g. salt marsh grazing, there are likely to be new RDA responsibility to fund rural projects (Caroline Salthouse, North West Coastal Fora, pers. com. 2005).

RDAs are already heavily involved in coastal regeneration and development. It is anticipated the RDAs will have an increasing level of involvement in regeneration of coastal towns and coastal tourism due to the economic potential of coasts that attract investment and tourism. However, the development of the coast will need to be sustainable so as not to damage the environment (visual, social and natural) and deter investors and tourists. This will be compounded by a new legal framework that affords more protection for the marine environment.

Impact on the marine environment

Increases in the number of people living in coastal towns along with increases in the number of tourists to coastal towns are likely to bring additional pressures on the marine environment. Increases in water use and sewage production is likely to require increases in the need for waste water treatment and perhaps desalination plants. There are likely to be impacts on the marine substrates where developments are built in the sea. The greatest impact will be on the water quality, if all waste water from coastal towns continues to be discharged into the sea with a lack of secondary or tertiary treatment. This has serious implications for bathing water quality and beach condition. Poorer water quality may increase turbidity which could be detrimental to benthic marine species and habitats. Changes in water quality may cause the damage to marine ecosystems and species. However if the UK complies with the EC Water Framework directive, effective measures would be put in place to avoid any impact on water quality.

Predicted future increases in tourist volumes in coastal locations may negatively impact the coastal zone. Large numbers of tourists place considerable pressures on coastal resources and recreational activities, as well as having negative impacts on the environment. For example, launching craft at non-constructed access points may result in compaction and erosion of features both on land and the intertidal area. Additionally, if the quality of beaches are reduced through overuse from tourism, causing increases in litter for example, people will be deterred from investing in the area.

It is therefore essential that RDA regeneration projects of coastal towns and attractions are developed in a sustainable manner to ensure the value of the environment which attracts investment is not compromised.

7.1.2 Marine industries

Marine industries are one of the main economic drivers in the South West and South East of England regions. The North West is also currently developing the maritime industry cluster. The importance of marine industries in the other coastal regions however has reduced over the years due to the decline of shipping and other marine-related industries, but continues to play a minor role.

A joint study by the Task Force and SEEDA estimated that there were 105,000 people employed directly in the South East marine sector which is 40% of all the UK marine total (Mair 2003). The

total number of South East firms that supply marine markets is 4,000, with half of these highly dependent on the sector (Mair 2003). While the largest number of firms supplies leisure marine markets, these tend to be the smaller firms in terms of employment. 'Marine Technologies' employ over 10,000 people with over 2,000 new jobs being created in Devon since 1995 (DTZ Pieda Consulting 2002).

The industry comprises firms engaged in all forms of marine construction, engineering and consultancy. This includes the design, manufacture and repair of all types of vessels and offshore platforms. It also includes other marine technologies such as the design and manufacture of navigation equipment, marine related research and development, marine consultants and offshore engineers. Ship building has declined so diversification and specialisation is important and new opportunities may arise in the offshore industry with the use of new materials and technology where a strong skills base will provide a competitive advantage.

Future changes

Marine industries will continue to grow steadily but the growth will be limited to regions where RDAs are actively investing in maritime businesses, such as the South East, South West and North West. Policies within each of the RESs for each of these regions are driving the promotion of industries. The RESs have a 10 year lifespan and therefore there will be continued growth of marine industries in these regions, where policies for driving marine clusters and industries have been created. SEEDA and SWRDA have also funded specific marine groups to help co-ordinate and drive marine industry development. The application of a marine information hub in the South East also provides a viable resource for marine industry investment. The infrastructure in the South will therefore play an important role in the continued expansion of marine industries. Research in marine technologies will continue to grow as will investment in ship building and repair. However, marine nature conservation designations will restrict developments where space is limited.

Impact on marine environment

There are likely to be increased pressures on the marine environment caused by the expansion and development of marine industries. The pressure is most likely to be seen within inter-tidal waters where coastal development for new or expanded factories or developments cause increased sedimentation and pollution. The EIA process will identify and help protect the marine designated sites from significant damage (or mitigate against that damage) but it is likely that intertidal and subtidal ecosystems will continue to be affected by increased development. The increase in marine industries will likely cause an increase in marine traffic and an increase in the number of boats being built and repaired in coastal waters is likely to increase the chances of marine pollution. Investment in development of marine industries in coastal areas will create a requirement for greater protection from coastal flooding. 'Holding the line' as a coastal defence option is already creating problems associated with coastal squeeze, where inter-tidal habitats such as saltmarsh are being lost to rising sea levels. The continued need to hold the line with current coastal defence alignment to protect current and future marine industries will only cause more and more inter-tidal habitat to be lost.

7.1.3 Renewable energy

Renewable electricity can be generated from a number of sources related to the sea: tidal, wave and offshore wind farms. The use of wind to drive turbines is currently the most technologically advanced method for producing renewable energy. The UK is one of the windiest countries in Europe and therefore has tremendous potential for offshore wind farms. Whilst wind energy is not uniquely coastal, theoretically the UK coastal areas experience the highest levels of sustained

significant wind speeds. It has been estimated that the UK's present electricity needs could be met more than three times over by offshore wind energy. The first offshore wind farm, consisting of two turbines, was built off Blyth, Northumberland. It became operational in 2001 and generates enough electricity for 3,000 households (Atkins 2004[b]).

EEDA is currently investing a large amount of funds into offshore wind energy projects through the establishment and funding of the group Renewables East and the provision of funds to build a Renewables Centre. The centre will provide a core focus for research and development into renewable energy off the East coast of England, where offshore wind is a major focus.

The investment in wave power is being undertaken by the SWRDA through the funding of the wave hub project. Investment in wave power may be worthwhile, assuming technological barriers can be overcome, and, given the increasing emphasis on renewable energy sources.

Harnessing tidal energy is also a possibility for electricity generation in the UK. There are many areas in the UK with strong tides, including the coasts around Anglesey and Pembrokeshire, as well as exceptional tidal regimes of the Severn Estuary and Bristol Channel. The latter has been the projected location of the Severn Barrage. Although the idea of a barrage was dropped two decades ago after extensive feasibility studies, there is renewed interest as moves to counteract global warming gain momentum. NWDA funded a project looking into the development of a marine current turbine tidal device in order to open up supply chain opportunities for regional companies.

One North East has developed a marine offshore cluster and the NaREC. NaREC is taking forward proposals in the fields of new and renewable energy through a partnership between Industry and Academia. Wind, wave and tidal energy are major focus of the project.

Future changes

It is predicted that there will be a significant growth in the renewable energy industry over the next 50 years. It may soon be possible to deploy wave and tidal technology on a commercial scale, whilst offshore wind technology is already advanced to the extent that the industry is poised for major and rapid expansion (DTI 2002).

One of the main drivers in the growth of the renewable energy industry is the commitment of the Department of Trade and Industry (DTI) to the reduction of carbon emissions, as part of the climate change challenge (UN, 1997, cited in Atkins 2004 [b]). DTI's new energy policy commits to the reduction of the UK's carbon emissions by 60% by 2050, with real progress to be shown by 2020. As a result the DTI has set a target for renewables to supply 10% (or 10,000MW) of the UK's electricity by 2010 and 20% by 2020.

A strategic framework has been drawn up for a major expansion of offshore wind. The specific targets and milestones for wind energy production are for 8-16% of renewable energy to come from offshore wind (approx 1600MW based on 10% target above) (DTI, 2002). Developers have entered into leasing agreements for wind farm sites around the UK coast with a total capacity of at least 1400MW of renewable energy, sufficient to power a city the size of Greater Manchester. The offshore wind industry considers a further 3000-4000MW can be built by 2010 (DTI, 2002).
There are 20 offshore wind farms planned for commissioning by the summer of 2005, which should supply 1.45GW of renewable energy (DTI, 2002).

Renewable energy is likely to feature strongly in the RES and policies of EEDA, One North East SWRDA, and possibly NWDA, as they look to actively promote investment into renewable energy projects to meet their sustainable development obligation to reduce energy consumption.

Impact on the marine environment

The construction of large scale offshore developments is likely to have a number of negative impacts on the marine environment, and these include:

- Likely changes in benthic communities within the affected area and resultant indirect impacts on fish;
- Likely effects on fish populations and their predators such as seabirds and sea mammals;
- Potential changes to the hydrography and wave climate over a wide area, and potential changes to coastal processes and the ecology of the region;
- Likely effects on spawning or nursery areas of commercially important fish and shellfish species;
- Likely effects on mating and social behaviour in sea mammals, including migration routes;
- Likely effects on feeding water birds, seal pupping sites and damage of sensitive or important
- intertidal sites where cables come onshore;
- Potential displacement of fish, seabird and sea mammals from preferred habitats;
- Potential effects on species and habitats of marine natural heritage importance;
- Potential cumulative effects on seabirds, due to displacement of flight paths, and mortalities from bird strikes, especially in sensitive rare or scarce species;
- Possible effects of electromagnetic fields on feeding behaviour and migration, especially in sharks and rays, and
- Potential marine conservation and biodiversity benefits of offshore wind farm developments as artificial reefs and 'no-take' zones (Defra, 2004[a]).

Alongside the implications for nature conservation, there are also likely to be visual impacts on the landscape which will affect tourism and may deter investment along the coastline. There may also be implications for fisheries activity and shipping with increased traffic caused by the obstruction of a large part of the sea.

7.1.4 Ports and harbour development

EEDA has invested a significant amount into the expansion and development of the ports on the east coast, such as Harwich, Felixstowe and East Port at Great Yarmouth. Other RDAs investing in port development include the LDA within the Thames, NWDA and SWRDA at Falmouth Docks.

UK ports are vital gateways for trade and travel. There are over 650 harbours in the UK, of these only 20% (130) are commercially active. The four biggest estuary ports London, Tees and Hartlepool, Grimsby and Immingham, and Forth handle over 200 million tonnes between them (Atkins 2004[b]). Ports and harbours also provide ferry transport, an essential service for non-mainland locations. In 1999, 16 million passengers travelled on inter-island services, including 8.3 million passengers per year to/from the Isle of Wight (Atkins 2004 [b]).

In the last few years UK container ports, and in particular Felixstowe, have experienced quite rapid growth. Some of this growth is related to the performance of the UK economy, but there has also been a substantial growth in transhipment traffic. This reflects the competitiveness of Felixstowe and its use by major world shipping lines as an important European hub port. In 1989 Felixstowe already accounted for 35% of UK container movements, but by 1999 this had grown to nearly 41%, though its share of containers carrying UK deep-sea exports and imports has probably not grown (Atkins 2004 [b]).

Future changes

In the future there is likely to be continued growth in the container ship industry. According to estimates by the World Bank and others, expansion of world seaborne trade is expected at the rate of 4% a year over the next decade, almost doubling current volumes by the year 2010. (British Shipping: Charting a New Course, 1999 cited in Atkins 2004 [b]). All commentators expect growth in containers moved at UK ports to continue at rates well above UK GDP growth.

There are a number of port developments currently in the pipeline, including London Gateway (Shell Haven) in the Thames Estuary and Harwich Bathside. In addition, a new berth is planned for Tilbury in Essex and two further berths at Felixstowe in Suffolk. It is expected that as associated shipping and transport increases, current ports will continue to expand and there is potential for new ports in the future.

There is also likely to be increases in shipping traffic specifically short-sea shipping. The English Channel which is already the busiest shipping area in the UK is likely to be particularly affected. The density of ships off the East coast is likely to increase with expansions to the ports at Felixstowe and Tilbury.

Impact on the marine environment

Capital dredging for new port, harbour and marina developments, includes the construction, extension or deepening of berths and navigation channels for access by larger vessels. These operations will, in general, require consent under the Harbours Act 1964 (or equivalent local Act) and will therefore be subject to the Assessment of Environmental Effects Regulations. The impacts of different types of navigation dredging can alter local and more regional hydrodynamics and (should offshore disposal sites not be sought) add increased pressure to landfill sites (and cost implications of Landfill Directive requirements).

Marine pollution is likely to increase with future changes in ports and shipping. Oil spills and energy related discharges can cause a significant impact on coastal zone ecology. Discharges of oil and chemicals have various lethal and non-lethal effects on fish, birds, molluscs, and cetaceans and other mammals. These include cancers, damage to growth, to feathers, scales and skin, to respiratory systems, to livers and to immune systems, and also disturbance of reproductive, feeding and other behaviour.

To protect the marine and coastal environment from the current levels of shipping activity and the predicted increase in shipping, the European Commission adopted a White Paper on Environmental Liability on 9 February 2000. The White Paper sets out the structure for a future European Environmental Liability Directive which aims at implementing the polluter pays principle. It describes the key elements needed for making such a regime effective and practicable (EUROPA 2003 cited in Atkins 2004[b]).

RDAs are likely to be a key player in controlling port and harbour development in the future due to the economic benefits of ports and harbours. A revised legal and administrative framework could result in RDAs taking a more pro-active approach to sustainable port development i.e. the same problems that occurred at Dibden Bay would not occur in the future (see Section 6.1.2).

7.1.5 Fisheries and aquaculture

The UK fishing industry is a diverse sector made up of inshore and offshore fishermen, targeting finfish and shellfish. The industry (not including aquaculture) had a turnover of £546 million in 2002 and supports over 12,000 direct jobs resulting in £800-1200 million of economic activity in

the UK. Around 50% of UK catch (by value) is exported. The processing sector employs over 22,000 people, including those processing imported and farmed fish.
The abundance of fish caught for sale is reducing as fish stocks have declined over the years. Increases in technology added to an increasing population demanding more fish for consumption has fish stocks to become severely depleted. To meet the demand for food fish aquaculture has developed and is now the fastest growing segment of world food production, having risen from 10% of world fisheries production in the early-80s to 33% at the turn of the century (roughly 40 million tonnes, worth US $55 billion). Most of the UK aquaculture industry is based in Scotland, with just under 2,000 direct jobs and 8,000 in supporting sectors (Atkins 2004[b]), but fish farming is becoming more important in England.

Yorkshire Forward has invested a significant level of funds into fisheries related projects to promote sustainable development within the industry. The RDA understands the importance of sustaining the fish stocks if the industry is to thrive in the future. One North East is currently funding 2 year programmes to train fish vessel skippers and engineers.

Future changes

The future of commercial fisheries is dominated by the European Common Fisheries Policy (CFP) which is the framework for management. However, the Prime Minister's Strategy Unit has recently released a paper on the future of the UK fishing industry (Prime Ministers Strategy Unit, 2004). That paper modelled several future scenarios for the UK fishing industry, and concluded that all UK stocks are vulnerable to over-fishing in the future unless management is improved. If well managed, the turnover of the UK fishing industry could expand by 15-20% in the next 10-15 years. However, if stocks are badly managed and the industry fails to modernise in order to compete, turnover could contract by 30%. The most pessimistic scenario of future prices and stock collapse would result in the loss of around 50% of UK catching sector employment, with associated knock-on effects in local communities. Even so, employment by the fishing industry is likely to decrease.

Despite the poor health of fisheries, it is likely that fishing activity will be maintained as economic pressure forces the industry to continue at a level which is not sustainable.

The future development of aquaculture is strongly market driven, this is due to the fact that the wild fisheries have declined slightly over past five years means that development of the UK share of the global market will need to come from cultivated sources. Considerable funds have been spent by the Government on aquaculture research, particularly on work to control disease. It is likely that in regions where fisheries are an important economic driver,e.g. Yorkshire and Humber, significant investment may be spent on aquaculture in the future.

The recent reform of the CFP has called for the establishment of Regional Advisory Councils (RACs) which will give stakeholders (primarily the industry) a greater role in the management and decision making process. The intention is to create regionally based sustainable fisheries requiring the flexibility to develop appropriate management strategies and there maybe an increased role for RDAs in terms of fisheries investment decisions. For example, the Haskins Review has highlighted that there will be increased involvement for RDAs in sea fisheries, but details unclear at this stage (Simon Richardson SEEDA pers com 2005). Certainly, with the current state of fish stocks, it is likely that RDAs will be required to undertake fisheries projects with sustainable priorities following the lead of Yorkshire Forward.

Impact on the marine environment

Impacts of continued fishing out at sea cause:

- The decline of fish stocks as fishing down the food chain occurs;
- Increase in bycatch;
- Impacts on benthic environment from trawling;
- Impact on protected species and habitats;
- Marine pollution from fishing vessels – litter, oil, discarded nets

Aquaculture may be developed on land in ponds, or in subtidal waters in pens. These developments impact on the marine environment in a number of ways, for example through effluent effects on water and sediment quality, diseases, parasites, use of antifoulants, escapees, structures and community conflicts regarding resource use and access. The use of fishmeal as food for farmed organisms may also impact on fish stocks in the marine environment. There is also habitat reduction when important coastal ecosystems are removed for aquaculture developments.

7.1.6 Marine aggregates

The UK is second only to Japan in the production of marine aggregates. It is a major supplier for the European and domestic construction industry and for coastal protection schemes. Marine aggregates supply 15% of total aggregate in the UK. They provide 59% of the construction market and 11% of beach and fill nourishment for coastal defences and 30% is exported to mainland Europe mainly Holland and Belgium (Atkins 2004[b]). The extent to which indivudal regions are dependent on marine-won aggregates is related to the availability of terrestrial deposits and quarries. For example, in London and the South East, more than a third of all sand and gravel (around 5 million tonnes per aunnum, worth £40-50 million) is marine-dredged. This is largely due to the shortage of terrestrial crushed rock supplies, meaning that gravel is used in place of crushed rock in many applications. Marine In mainland Britain, marine aggregates are extracted by commercial mineral companies under licence from the Crown Estate. A levy is imposed on extraction, some of which goes to the Aggregates Levy Sustainability Fund in order to improve the sustainability of the aggregate production.

Dredging is restricted to relatively localised areas: the Humber off Great Yarmouth, Outer Thames Estuary, the south coast from East Sussex to the Isle of Wight, the Bristol Channel and Liverpool Bay. There are currently 72 active licences and 28 production applications in the pipeline. Recent investigations into significant exploitable sand and gravel resources in the eastern English Channel may start a new phase of marine aggregate extraction further offshore and in deeper waters (Atkins 2004 [b]).

RDAs have not been involved in marine aggregate extraction to date.

Future changes

The marine aggregates industry is predicted to remain steady with the potential for future growth. One of the major growth markets for marine aggregates is beach replenishment, although the market is variable. Humphreys *et al* (1996, cited in Atkins 2004[b]) estimate an annual demand for sand and gravel for beach recharge in England and Wales for the next 20 years of between 3 and *6.5* million m3 per year (about 5.5 - 11.5 million tonnes). Large aggregate deposits have been identified in the eastern English Channel, which if licensed will replace diminishing reserves in the southern North Sea and will secure supplies for several decades to come. Government policy is to increase the rate of recycling of aggregate in order to reduce demand on the primary, non-renewable resource. There will also be continued use of marine-won supplies (Atkins 2004[b]).

In future RDA investment might focus on protecting and developing infrastructure for aggregates, for example wharfage and distribution facilities for primary and recycled material. It is not

anticipated that RDA involvement will increase greatly in the future because direct regeneration drivers associated with marine extraction have not been identified.

Impact on the marine environment

The International Council for the Exploration of the Sea (ICES) published a comprehensive literature review of the impacts in 1992 (cited in Atkins 2004[b]). The physical impacts of aggregate extraction are loss of habitat through removal of surface sediments at the bed (including benthic communities), loss of material during transport to the surface (re-suspension of fine particles in the water column) and transport to shore. Biological impacts are primarily through removal of species and smothering (this can impact the food chain dynamics).

The UK Marine SAC website (www.ukmarinesac.org.uk/activitites/ports/ph3-2.htm) summarises the impacts of aggregate extraction as follows:

- Removal of subtidal benthic species and communities.
- Short term increases in the level of suspended sediment can give rise to changes in water quality which can affect marine flora and fauna, through increased turbidity and the possible of organic matter, nutrients and or contaminants depending upon the nature of the material in the dredging area.
- Settlement of the suspended sediments can cause smothering or blanketing of subtidal communities and/or intertidal communities (if navigational dredging).

8 Recommendations and Conclusions

8.1 Recommendations

Currently there is very little incentive for RDAs to undertake projects within the marine environment that apply the principles of sustainable development. This is mainly as a result of the legal and administrative framework that guides the work RDAs undertake, which is primarily for economic benefit to the region. This often conflicts with sustainable development and environmental principles. Future work needs to provide an incentive for RDAs to implement improved environmental protection in marine projects. Changes in the legal system are the most likely driver. Recommendations have been given below:

- *A clear remit for RDAs to implemented sustainable marine projects*

The proposed Marine Bill should provide a framework and remit to ensure that any RDA investment in the marine environment is fully sustainable and compliant with conservation legislation and policy. The revised administrative and legal framework would provide a greater remit for illustrating a greater adherence to sustainability objectives

For RDAs to have a role in Marine Spatial Planning (MSP) the framework would provide a remit for MSP to integrate with the Regional Spatial Strategies. This would ensure that there is an integrated and cohesive planning framework for land, coast and sea which would ultimately lead to reduced conflicts in planning decisions and an improved environment.

The revised framework would provide a remit for RDAs to produce a Regional Maritime Economic Strategy to ensure that all economic activity in the marine environment is sustainable. However, allowances could be made for some regions where marine industries are not a key economic activity. Where marine-related industries are not an important economic driver, specific marine economic strategies need not be created but there should be a remit for RDAs to incorporate marine environmental policies into RESs to ensure the marine environment is not compromised.

- *A remit for RDAs to develop sustainable development strategies or policies for the marine environment.*

The revised framework would lead to a remit to prioritise sustainable objectives in the marine environment and these should be translated into relevant policies within the RES. Prior to revised new legal and administrative framework, RDAs should be encouraged to implement sustainable marine management into next round of RES. English Nature should engage in the RES reviews that are underway in many of the regions this year and which will then influence RDA Corporate Plans for 2008-2011. At present RDA Corporate Plans only have 3 year life cycles. For adequate investment in marine projects long-term investment needs to be applied (see below).

The development of marine sustainable development policies with the RES similar to the current SEEDA Objective 5 would be appropriate but particular reference has to be made to the marine environment.

Currently, RDA projects are appraised for sustainable development principles at the pre-planning stage but it is a fairly new system which is currently not providing enough protection for the

marine environment. There should be a requirement for all plans and strategies which provide a framework for RDA investment or expenditure to go through an improved sustainability appraisal.

- *Clear guidance to support any new responsibilities for regional government in the marine environment*

At present there is very little clarity of the role that different organisations within regional government should play in relation to the marine environment, which acts as a constraint to their involvement in sustainable marine projects. The revised framework should clarify any new responsibility for RDAs or clarify their relationship with any new Marine Agency. There is requirement for the production of clear guidance to enable RDAs to implement their responsibilities.

The guidance or remit would provide definitions so that there is greater clarity and understanding of the level of RDA responsibility in the development and funding of marine-related projects. For example, any future scope to improve the role of RDAs in the sustainable development of the marine environment should characterise the tidal Thames Estuary and other estuaries as a 'marine environment' to ensure that the LDA and others would be willing to participate.

The remit and guidance would outline exactly what RDAs are required to do and where their responsibilities lie for investment in marine projects. Regional Assemblies are likely to have ultimate responsibility for integration of marine spatial planning and land planning in Regional Spatial Strategies, the RDAs will have a role in ensuring sustainable economic investment in line with the RSDFs.

It is recommended that guidance is produced for regional government by ODPM to inform RDAs of their likely future roles and responsibilities in the light of a proposed Marine Bill and introduction of marine spatial planning.

- *A strategic review of marine-related activity*

In conjunction with providing a remit for incorporating marine sustainable development principles into the current legal and administrative planning framework of RDAs, a strategic review of the region's marine-related activity along with actual and potential use of marine resources (e.g. fisheries and mineral extraction to tourism, sport & recreation) needs to be undertaken to evaluate the sustainability of recent projects.

The review should incorporate an assessment of the risks facing natural resources and the social environment and identity the social and environmental benefits gained from project implementation. The assessment would improve RDAs awareness and enable RDAs to value the marine environment more highly. There should be guidance or remits for RDAs to develop sustainable development strategies for the natural marine environment to ensure that their money is at least supporting sustainable projects rather than acting against the principles of sustainability (Roger Covey English Nature pers com. 2005).

- *Improved co-ordination within and between RDAs*

There is a need for improved co-ordination within and between RDAs. This may prove especially pertinent for Regional Seas that are straddled by two regions (or vice versa). A number of different RDA sector groups have been identified as having some degree of responsibility for the marine environment, whether it be sustainable development teams, rural teams, planning teams, marine industry cluster teams or environment teams. To ensure that projects consider environmental sustainability themes in marine environmental projects there needs to be improved co-ordination, communication and understanding of the importance of the marine environment

and the role it plays in driving the economy. A greater remit for marine sustainability would provide an incentive for improved co-ordination within each region. Improved co-ordination within and between RDAs is also required to identify lessons learnt and to disseminate best practice.

- *Improved external stakeholder engagement*

Future marine legal changes may also provide an incentive for better consultation and involvement of stakeholders to ensure all relevant parties are invited to plan marine-related projects and ensure that sustainable development principles and the marine environment are not compromised.

Marine spatial planning on a regional sea level provides an opportunity and incentive for improved co-ordination and communications with other stakeholders. This is because some of the regional sea boundaries cross cut the existing regional terrestrial boundaries and future marine spatial planning may provide the incentive for better co-ordination and communication, which is likely to be enforced legally through the proposed Marine Bill.

It is recommended that RDAs make use of the ICZM community which has a history of promoting sustainable development (i.e. various coastal fora and specific organisations such as local authorities and coastal and estuarine partnerships) and would welcome the opportunity to work with regional government. The ICZM community has a thorough understanding and knowledge of sustainable development in the coastal and marine environment. There is also an existing communication framework which could be utilised by the RDAs, for example the Local Government Association's special interest group on coastal issues.

An example of where RDAs should improve the communication with other stakeholders is during the development of marine spatial strategies. RDAs with coastlines should develop marine sustainable development strategies and policies but not in isolation to the other key statutory or non-statutory agencies and organisations that have a direct responsibility to manage and protect the marine environment (Simon Richardson pers com SEEDA 2005). RDAs should consult English Nature, Defra and other stakeholders during preparation of Corporate Plans and RESs in order to ensure sustainable development of the marine environment is at the core of RDAs decision making as well as identifying other opportunities for investment.

- *Improving understanding and expertise*

In order for RDAs to understand the important role the marine environment plays in providing the backbone to all marine-related investments, there needs to be improved understanding and awareness of the value of the marine environment, its sensitivities and opportunities.

The North West Coastal Forum explains that there needs to be much stronger recognition at Board level and at lower levels of RDAs of the (sometimes indirect) benefits that healthy, clean and diverse marine and coastal natural resources can bring to jobs, health, desirability of home, leisure or business locations, visitor income, etc. This could be achieved by implementing an appropriate training system of Board members and other key staff when they are appointed which explains the importance of environmental issues. We recommend presentations to the Board and other key staff members are delivered to improve understanding.

It is recommended that a database of experts is compiled of internal and external marine and coastal expertise that could support the officers in the development of policies, strategies and projects and help identify opportunities for sustainable development. The ICZM community could provide significant expertise and advice in this field.

It is recommended that research is undertaken to quantify the economic value of sustainable investment in the marine environment which the RDAs could use as a future driver for sustainable investment. The study could be similar to the recent RSPB (2004) commissioned study on the

Potential Benefits of Marine Spatial Planning to Economic Activity in the UK, but would provide an insight into the economic benefits of sustainable investment projects in the marine environment.

- *Funding provision*

The benefits of sustainable projects are not often recognised in the short term and therefore RDAs need to develop medium to long term targets. A longer term review process that is more applicable to addressing environmental issues and the prioritisation of sustainable principles is recommended.

A system for long term funding for sustainable marine projects would encourage RDAs to invest in projects with aims to enhance and sustain marine environmental resources. Currently RDAs are more likely to undertake environmental projects which exhibit economic and social benefits and a system of direct governmental funding could be applied for these projects. Ideally central government would allocate increased funding through a Marine Agency or champion for marine environmental projects. Funding could also be provided from environmental levies such as the Aggregates Levy Sustainability Fund or from polluter pays funds, e.g. through the future European Environmental Liability Directive, which aims at implementing the polluter pays principle.

If the marine environment is considered an important economic asset within the region, RDA should employ marine environmental staff with the expertise and power to ensure sustainable development principles and environmental issues are taken seriously within investment projects. This should be someone with at least 5-10 years marine environmental experience. The Board that controls the RDA should ideally have marine environmental expertise, preferably someone with a wide understanding of both the maritime industry and the marine environment.

Funding specifically directed to marine sustainability should ensure that project planning fully incorporates sustainable development into marine activity projects.

In addition, RDAs could provide more funding themselves by assisting with long term funding for estuary and coastal partnerships for example, which help to steer sustainable development in estuaries, and deliver principles of ICZM (Caroline Salthouse North West Coastal Forum, pers com 2005).

8.2 Future capacity building

Table 8 RDAs and staff who would be willing to learn about future changes in the marine environment that may affect their activities, including marine spatial planning and the Marine Bill.

RDA	Further Guidance	Personnel	Position	Method
NWDA	Yes	Eddie Keating	Maritime Cluster Manager	Event, Printed and Web Based Guidance
One North East	Yes	Susan Stewart	Environmental	Event, Printed and Web Based Guidance
Yorkshire Forward	Yes	Angela White		Event
EMDA	Yes	Andy Barron	Environmental Sustainability Advisor	Event
EEDA	Yes	Paul Hinds	Environmental Policy Advisor	
LDA	Yes	Lesley Harding	Environment Sector Manager	
SEEDA	Yes	Simon Richardson and	Environmental	Event

		Andrea McCallum	Resources Manager and Solent Area Manager	
SWRDA	No comment	Claire Gibson	Head of Planning	

RDAs were asked if they would be interested to learn more about the sustainable development of the marine environment and marine spatial planning. Table 8 provides details of RDAs which would like to be engaged, and the relevant personnel. However English Nature warn that whilst it would be a good idea to hold an event to educate RDAs on the issues of marine sustainability, RDAs first need convincing at a higher level that they need to be involved to support attendance by relevant staff.

The LDA would be willing to be included in any future work but only if it was directly relevant to the Thames Estuary, as many of the estuary issues differ from 'true' coastal issues (Lesley Harding LDA). In particular, given that the region) fall outside the scope of the Haskins review, the LDA and other RDAs will not have additional funding to support capacity to deliver additional work in this area where it falls outside the existing remit.

8.3 Conclusions

The following conclusions can be drawn from the report:

- The RDAs value the marine environment but mainly for economic purposes;
- RDAs are hampered from prioritising sustainable principles by the current legal and administrative systems that prioritise economic gain;
- There is very little reference to sustainability of the marine environment in the statutory framework that drives RDAs' work;
- Marine projects undertaken by RDAs are mainly for economic, regeneration or employment purposes. Only when natural resources are directly exploited are sustainable development principles prioritised;
- A new legal and administrative system may provide new opportunities where there will be more incentive to invest in sustainable marine projects;
- The new system would provide a framework for the ODPM to produce guidance for RDAs on sustainable marine projects;
- RDAs need to improve internal and regional communication and co-ordination between marine staff and related teams;
- RDAs need to have a process of awareness raising and capacity building to increase RDA capability in marine environmental sustainability;
- RDAs need to improve engagement with marine and coastal stakeholders when developing and implementing marine projects; and
- The existing ICZM community could provide the technical expertise to assist RDAs when developing and implementing marine and coastal projects.

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10 Acknowledgements

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Appendix A: PREVIOUS COASTAL MANAGEMENT REVIEWS

Just Coasting – An assessment of the commitment of the devolved administrations and the English Regions to Integrated Coastal Zone Management.

This study looked at the commitment of regional government to ICZM in the light of the EU Recommendations for applying ICZM. The study highlighted the pitfalls which deter regional governments from making the coast and marine environment a primary concern as the primary focus of RDAs is business and investment in regeneration of regions. The report revealed that there had been very little marine-related activity on a regional government level but has increased substantially in the last 12 months. This is because most of the initial regional development work has been driven by policies to invest in regeneration of inner-city areas and brown field sites through sustainable planning. Often the marine environment is not high on the list of RDA priorities.

Integrated Coastal Zone Management in the UK: A Stocktake

The recent Stocktake of ICZM in the UK (Atkins, 2004), concluded that at a local level there had been significant improvement in coordinated management with an increase in stakeholder consultation and participation which has led to more sustainable management practices. It was also recognised that there have been improvements in coordination and cooperation at a national level between government departments and increased consultation with NGOs and other stakeholders.

However, the Stocktake concluded that engaging regional Government, which has a significant role to play in the sustainable management of the coastal and marine environments, was extremely difficult.

Representatives from all nine RDAs were consulted during the ICZM project to gain an understanding of each RDAs current policy towards the sustainable development of the marine environment. In many cases, the project established that very few RDAs had any strategy or policy which related to the marine environment, except in some cases where marine and coastal activities acted as a main economic driver within the region. In addition, some RDAs lacked co-ordination and regional communication in marine and coastal development because no key personnel were employed in the discipline, leaving a void in dealing with marine issues.

A Strategic Approach to the Management of the Coast in South East England

Atkins undertook a project to assess the feasibility of a strategic approach to coastal management of the South East. The study found that coastal management suffered from a lack of regional co-ordination which has lead to plethora of non-statutory and statutory management plans leading duplication and conflict. The study also highlighted that communication on a regional level was an issue and that co-ordination and communication would be vastly improved if funds were allocated to employ a regional coastal co-ordinator.

Appendix B: MARINE AND COASTAL RELATED REGIONAL ECONOMIC STRATEGY POLICIES

RDA	Policy	Priorities	Detail	Ref. to marine environment
North West (2003) Regional Economic Strategy				
North West	**1.1 – Accelerate business cluster network development in those sectors with potential for growth (Maritime is identified as one of these).**	Point 1.1.2 Establish networks and develop strategic action plan for sectors not yet operational.	Maritime Strategy Action Plan by May 03 Interim Cluster Head by June 03 Cluster network structure by April 04	None
	4.3 - Develop and implement proposals for regeneration coastal resorts to support diversification and stimulate business growth including tourism		Tourism Prepare and agree "strategy agreements" setting out key priorities for individual resorts	None
	10.1 – Develop and implement a co-ordinated regional marketing programme, based on market research.	10.1.12 Develop a programme of activity to promote tourism in the Northwest with the aim of improving the regions image as a tourism leisure and business tourism destination	Identify and implement specific campaigns such England's Golf Coast and Northwest Gardens Campaign.	None
	10.4 – Develop and implement a regional major events strategy, building on the Commonwealth Games, aimed at attracting more business and leisure visitors to the region	10.4.3 Develop pilot projects linking marketing / development plans to major events and themes	Develop and implement marketing plan for promotion of 'England's Golf Coast' and links with British Open at Hoylake in 2006	None
One North East (2003) Regional Economic Strategy: Realising Our Potential				
North East	**B5.1 Securing Improvements in Transport Infrastructure**	Policy reflect improvements to port infrastructure		None
	B6.3 Creating and enhancing the environment	Work for the protection and enhancement of the historic and natural environment by implementing best practice in capital projects as in Building in Sustainability		None
	D1 A more sustainable environment	Cluster Development A key element of the cluster development process will be helping organisations and companies to understand the environment as a business driver.	Offshore is a new Cluster Area	None
Yorkshire Forward Regional Economic strategy – Ten Year Strategy for Yorkshire and Humber				
	General	Need to address the economic base of rural and coastal areas. E.g. the Humber action Plan addresses the issue of coastal community restructuring using support from tourism development incl. eco-tourism pilots in the Humber estuary		None

Yorkshire & Humber	**Objective 3: To attract and retain more public investment in the region by providing the right product for investors and more effective marketing of the region.**	(E) Build on the potential of tourism to contribute to the regions economy.	Focus on enhancing the environmental assets - among others – on which tourism is based.	None
	Objective 5: Connect all of the regions communities to economic opportunity through targeted regeneration activity.	(F) Restore civic pride & engagement through community based renaissance in major towns.	Investment needs also focused on coastal communities.	None
	Objective 6: Enhance and utilise the regions infrastructure of physical and environmental assets	(F) Protect and enhance the regions environment	Includes harnessing economic opportunities from environmental assets. The opportunities and impacts of climate change are also to be addressed.	None None
Destination 2010 Regional Economic Strategy for the East Midlands 2003-2010				
East Midlands	**Strand 2 Enterprising communities**	Increase the level of economic activity within disadvantaged communities	Coastal Towns are given as examples of communities that have suffered decline and a lack of enterprise	None
	Strand 8 Transport	Improve the movement of freight in the region	Opportunities to transfer freight to the navigable and broad waterway network, for example on the Lower Trent and at East Coast ports.	None
	Strand 11 Rural development	Numerous policies on improving rural areas but nothing specific to coast or marine	Coastal resorts are mentioned as one of the rural areas that add to the diversity of the region	None
A Shared Vision, The Regional economic Strategy for the East of England				
East of England	**Goal 4. High quality places to live, work and visit.**	Goal includes priorities for homes, infrastructure, and regional assets incl. environmental & leisure.	Priority 1: Aims to ensure a sustainable supply of homes in strategic locations incl. coastal communities.	None
			Priority 2: Includes ensuring efficient transport services in coastal communities	None
			Priority 5: Need to safeguard character of the region incl. coastal resorts and those env & leisure assets that are associated with them	None
	Goal 6 Making the most from the development of international gateways.	Seaports noted as of key international, national and regional importance.	Priority 2: Making the most of gateways to the sea. Incl. investment in ports and port related developments that enhance local regeneration.	None
	Goal 8 Efficient use of resources	Key aspect is need to balance economic development with environmental protection and enhancement.	Priority 2: Offshore wind farms are seen as a specific opportunity for the regeneration of coastal communities	None

			Priority 4: establish the region as 'an exemplar of env. Sustainable development' – need to establish relationship between the economic and env. health of the region.	None
LDA (2004) Economic Development Strategy: Sustaining Success				
London	**General : London's Spatial development strategy**	Key aim is to make London a more attractive, well designed and green city.	Maintain and improve biodiversity as part of this.	None
	3. Investment in places and infrastructure	Relates to investment in London's places and infrastructure necessary to create a high quality environment	Key point is that investment is made in a way that protects and enhances the environment	None
		Economy reliant on sustainable arrangements for delivery of goods and services	Will require maximising use of least environmentally damaging means including the Thames.	None
		Thames Gateway features strongly in all areas		None
SEEDA Regional Economic Strategy for South East England 2002 - 2012				
South East England	**Priority 13 Transport – secure a sustainable transport network**	Need to improve the effectiveness of transport infrastructure in the region	Under Key Actions it is noted that the regions ports require continuing access improvements.	None
	Priority 15 Brownfield land - reclaim and reuse brownfield land to support sustainable, cohesive communities	Secure the re-use of brownfield land, and make the most of brownfield assets	The main areas for attention will be the priority regeneration areas of the Kent and Sussex coasts, Southern Hampshire, the Isle of Wight	None
	Priority 16 Environmental capital – invest in environmental capital to maximise its contribution to a sustainable regional economy.	Environment as support for a variety of industries and the main driver for tourism. There is therefore a need for investment to maximise the value of the environment to the region and thereby ensure sustainable growth	Primary industries including fishing and tourism (which would be strongly related to coastal areas in SE) depending on good environment. One of the key aims of the policy is to maintain the value of the environment as an economic asset	None
	Priority 18 Achieve sustainable management of water, waste and energy	Increase the proportion of energy derived from renewable resources, with steps being taken to encourage market development in this sector.		None
		Sustainable development framework objectives	To maintain and improve the water quality of the regions rivers and coasts.	Yes
Regional Economic Strategy for the South West of England 2003-2012				
	1.1 Support business growth	Support the development of key sectors	Marine is one of the key sectors Tourism is a key sector	Yes None

South West	**2.2 Support the regeneration of disadvantaged communities in the South west**		Support schemes to diversify the economic base where dependence on agriculture and fishing is strongest	None
	3.3 Conserve and enhance the region's physical and cultural capital to provide major benefits to tourism and the wider economy	Ensure that the key priorities from the Coastal Prospectus are integrated into existing priority activity – e.g. tourism, town regeneration, marine sector	The coastal and marine assets that are so important to the South West need careful development in order to maintain the benefit to local communities and the wider economy.	Yes
		Address the changing needs of rural economies	Develop icon projects and marketing i.e. Jurassic World Heritage Coast	

Appendix C: LIST OF RDA MARINE PROJECTS

RDA	Name of project	Description of project (one sentence	Start date	End date	Nature of RDA involvement
NWRDA	Mersey Narrows SPA Mitigation / Compensation Study	The study will set out in full the compensation / mitigation measures that would be required should a development proposal come forward for land at Seaforth Docks, Port of Liverpool, providing a clear indication of the measures that would be required, in order to inform Mersey Docks and Harbour Company (MDHC), the NWDA, regional partners and prospective developers.	March 05	June 05	Co-Funding body (in association with Mersey Docks and Harbour Company) and Project Manager.
	North West Ports Economic Trends and Land Use Study	The study will assess the economic trends and land use issues affecting North West ports for the next 20 years, and will provide the Agency with a sound evidence base to take forward into the emerging transport planning and policy agendas of the Northern Way Growth Strategy, the North West Regional Spatial Strategy, and forthcoming Regional Economic Strategy Review.	March 05	June 05	Co funding body and Project Manager.
	Inland Coastal Recreational Bathing Waters Project	The overall aim of the project is to improve coastal and recreational waters (ICRW) through action on the ground, improved planning mechanisms and management tools. Lead by the Environment Agency, this project combines research, advice to polluters, the public and local authorities across Interreg 3b member states.	May 03	July 06	Co funding body
	Marine Current Turbines	NWDA funded a project with Marine Current Turbines in 2003 / 04 to assist them with the development of their tidal current device and to open up supply chain opportunities for regional companies.	April 03	April 04	Project funder
	Renewables Programme	Envirolink's renewables programme for this year is working with three wave power technology developers based around the region.	April 04	April 05	Co funding body
	The Joule Centre	The Joule Centre (funded by NWDA) will fund R&D projects under the theme of marine renewables.	April 05	April 06	Project Funder
	SAIL NW	Company and action plan (tranche of projects) to improve marine leisure business sector	Ongoing		Leader during set-up phases and chief funding body
	Seafood NW	Company and action plan (tranche of projects) to improve fish and fish processing business sector	Ongoing		Leader during set-up phases and chief funding body
	NW Maritime Alliance for Skills and Productivity	Alliance and action plan (tranche of projects) to improve skills for the marine business sector	Ongoing		Leader during set-up phases, now co-lead and one funding body
	Mersey Maritime	Company set up to promote Merseyside's maritime industry	Ongoing		Initiator, key initial sponsor
One North East	NaREC	Centre of excellence for new and renewable energy. Working with universities and industry to fast track evaluation, feasibility studies and prototype evaluation and testing through to commercialisation.	Ongoing		Core funder
	Training Skippers and	Provision of two 12 month training programmes for 15 new skippers	Jan 05	Jan 07	Core funder

	Industry				
Yorkshire Forward	SRB7 Humber Fishing Communities Regeneration	Programme of projects to develop the economic sustainability of the fishing industry.	2001/02	2003/04	Funding
	Fishing Towns Fund – North Yorkshire	Programme of projects to support the fishing industry in North Yorkshire	2001/02	2001/02	Funding
	Addressing Disadvantage on the Coast	A package of measures, aimed at improving quality, research and promoting Scarborough and Whitby as key producers of quality seafood.	2002/03	2004/05	Funding
	Yorkshire and Humber Fishing Communities	A programme of projects identified as priorities to provide much needed assistance in the face of quota cuts and to secure a sustainable future for the industry.	2004/05	2007/08	Funding
	Seafood Cluster Activity	A programme of projects aimed at developing the seafood cluster in Y&H.	2002/03	2004/05	Funding
	Seafood Cluster Development Package (Future Project)	A variety of projects aimed at developing the seafood cluster, including catching sector.	2005/06	2008/09	Identified as a priority for investment
EMDA	Unable to provide details on marine projects				
EEDA	Support for Renewables East	Group established to promote renewable energy of which offshore energy is main driver			EEDA provide them with their core funding
	Offshore Renewables Centre	Business Plan written and planning permission granted for construction of centre and will provide a hub of activity for companies, R and D and technological initiatives into renewables, mainly wind			EEDA provided core funding.
	East of England Climate Change study	Looking into regional adaptation to climate change and coastal issues were part of this. The Climate Change Partnership has now been set up			Funded by EEDA
	East Port – Great Yarmouth – Outer Harbour Scheme	deepwater port fro freight and passenger			EEDA provided political support and funding for expansion.
	Expansion of Harwich and Felixstowe ports				EEDA support
LDA	East London Strategic Flood Risk Assessment	East London Strategic Flood Risk Assessment	Mid 2004	March 2005	Representation on Steering Group.
	Safeguarded Wharfs	Implementing the London Plan Safeguarded Wharfs Policy by using leaverage to make selected Thames wharfs viable for river based activity.	Early 2004	ongoing	Liaising with landowners, engaging prospective businesses, investigating use of CPO powers.
SEEDA	Marine SE	Business-led marine sector organisation	1/4/05	UFN	Core funding
	Marine Info Hub	Information resource for marine	1/1/04	UFN	Initial funding

	Marine clusters	Clustering to promote innovation & collaborative working	1/4/03	31/3/05	Initial funding
	Various waterfront regeneration projects	e.g. re-development of Rochester Riverside on the Medway, Ropetackle site at Shoreham, Woolston on the Solent, Cowes Waterfront (IoW)			
	Intermodal transport	Various Interreg projects			
	Solent Marine Economy Strategy	Possible strategy development	Not determined	Not determined	Funding and project management
	Shoreham Fisheries Project	Fisheries strategy developed using historical records to provide sustainable mangement	2003	2003	Funding and support
SWRDA	Invest in Fish SW	Developing sustainable mgt options for SW fisheries Jointly funded by SWRDA, M+S, WWF and Defra	04/2004	07/2006	Part Funding and membership of steering group
	HMS Scylla	Scuttling of wreck to create diver attraction www.national-aquarium.co.uk	March 2004		Funding and support
	Falmouth Docks	Potential capital dredge for cruise liner business	Current		Falmouth Docks are exploring funding from RDA
	Finding sanctuary	Developing a network of marine protected areas around the SW	Current		Host the project within SW Food and Drink
	Fisheries Strategy	Strategy for the development of the SW fishing industry	Current		RDA developed strategy
	Environment Driver Implementation Plan	A programme of investment activity	April 2004	March 2007	RDA plan for investing in the environment
	Market and Coastal Towns regeneration initiative	Various marine related projects e.g fish quay at Appledore			SWRDA initiative
	Wave Hub	A renewable energy demonstrator project www.wavehub.co.uk			Developed by RDA
	Marine South West	Group established to support economic growth of marine businesses www.marine-south-west.org.uk			Founded and funded marine industries group
	Newlyn Seafood Processing Park	Looking at providing high quality food quality units for fish processors			
	Rebuild Brixham fish market	SWRDA have been approached regarding the potential to rebuild the fish market	Current		
	National Sailing Academy in Portland	Development of the academy in the region www.wpnsa.org.uk			Co funded by SWRDA
	South West Climate Change Impacts Partnership	Partnership within region to tackle climate change and promote energy conservation www.oursouthwest.com/climate and www.regensw.co.uk			Co funded by SWRDA
	Economic development of the seaside resort of Weston super Mare	Regeneration of seaside tourist resort			Co funded
	Various Dock regeneration projects	Royal William Yard and Millbay in Plymouth, and Gloucester Docks			
	The creation of parts of the South West Coast Path				Part funded

The Wildlife Trusts are the UK's leading charity devoted to the protection of wildlife and natural habitats. Our vision is for the seas around the UK to support healthy habitats and thriving wildlife. We work with Government, industry and the public to promote better management of marine resources and effective protection for the marine environment. For further information see our website: **www.wildlifetrusts.org**

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