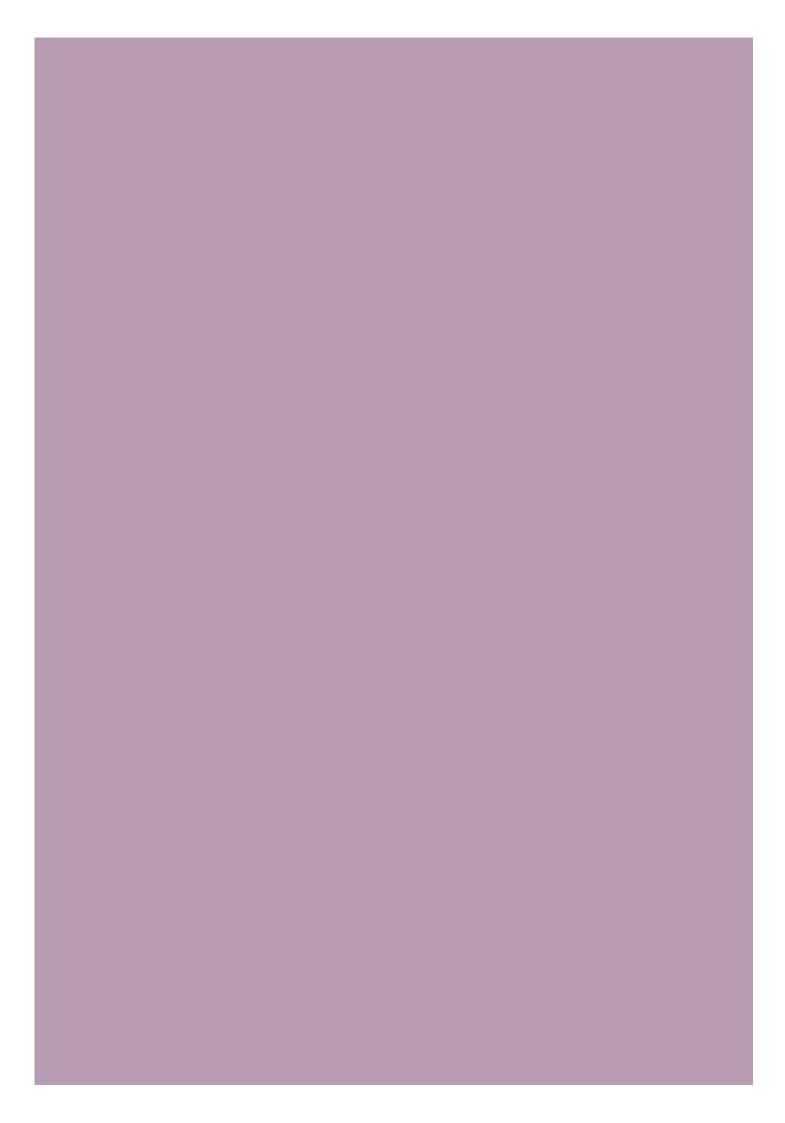


A MARINE SPATIAL PLAN FOR THE SHETLAND ISLANDS







A MARINE SPATIAL PLAN FOR THE SHETLAND ISLANDS PART ONE: POLICY FRAMEWORK

INTERIM DRAFT

This Plan was developed at the NAFC Marine Centre through the Scottish Sustainable Marine Environment Initiative (SSMEI), a three year pilot funded by the following organisations:













The overall guidance to the pilot is provided by a Local Steering Group (membership detailed in Appendix 2).

CONTENTS

MSP AQ1: Aquaculture

FOREWORD	9
SUMMARY	11
INTRODUCTION	12
Purpose of the Marine Spatial Plan	
Relationship to Other Strategies and Policies	
The Future of a National Marine Spatial Planning Framework	
Who Will Use This Plan?	
How Can I Use This Plan?	
Process of the Plan Production	
Box 1: The Ecosystem Approach	
The Planning Area	
Planning and Regulatory Authorities' Roles and Responsibilities	
Monitoring	
Forthcoming Sub-Area Marine Spatial Plans	
Maintenance of Data and Information	
VISION, AIM AND OBJECTIVES OF THE SHETLAND MARINE PLAN	17
Vision	
Vision Aim	
Aim	
Aim	18
Aim Objectives	18
Aim Objectives	18
Aim Objectives THE POLICIES	
Aim Objectives THE POLICIES 1. ASSESSMENT OF DEVELOPMENT APPLICATIONS	
Aim Objectives THE POLICIES 1. ASSESSMENT OF DEVELOPMENT APPLICATIONS MSP GD1: General Development Policy	
Aim Objectives THE POLICIES 1. ASSESSMENT OF DEVELOPMENT APPLICATIONS MSP GD1: General Development Policy MSP GD2: Developments in or near Sites of European Interest (SAC or SPA)	
Aim Objectives THE POLICIES 1. ASSESSMENT OF DEVELOPMENT APPLICATIONS MSP GD1: General Development Policy MSP GD2: Developments in or near Sites of European Interest (SAC or SPA) MSP GD3: Developments in or near SSSIs	
Aim Objectives THE POLICIES 1. ASSESSMENT OF DEVELOPMENT APPLICATIONS MSP GD1: General Development Policy MSP GD2: Developments in or near Sites of European Interest (SAC or SPA) MSP GD3: Developments in or near SSSIs MSP GD4: Developments in or near NSAs	
Aim Objectives THE POLICIES 1. ASSESSMENT OF DEVELOPMENT APPLICATIONS MSP GD1: General Development Policy MSP GD2: Developments in or near Sites of European Interest (SAC or SPA) MSP GD3: Developments in or near SSSIs MSP GD4: Developments in or near NSAs MSP GD5: Safeguarding Important Species and Habitats	
Aim Objectives THE POLICIES 1. ASSESSMENT OF DEVELOPMENT APPLICATIONS MSP GD1: General Development Policy MSP GD2: Developments in or near Sites of European Interest (SAC or SPA) MSP GD3: Developments in or near SSSIs MSP GD4: Developments in or near NSAs MSP GD5: Safeguarding Important Species and Habitats MSP GD6: Alignment of the Land-Sea Interface	
Aim Objectives THE POLICIES 1. ASSESSMENT OF DEVELOPMENT APPLICATIONS MSP GDI: General Development Policy MSP GD2: Developments in or near Sites of European Interest (SAC or SPA) MSP GD3: Developments in or near SSSIs MSP GD4: Developments in or near NSAs MSP GD5: Safeguarding Important Species and Habitats MSP GD6: Alignment of the Land-Sea Interface MSP GD7: Marine Protected Areas (MPAs)	
Aim Objectives THE POLICIES 1. ASSESSMENT OF DEVELOPMENT APPLICATIONS MSP GD1: General Development Policy MSP GD2: Developments in or near Sites of European Interest (SAC or SPA) MSP GD3: Developments in or near SSSIs MSP GD4: Developments in or near NSAs MSP GD5: Safeguarding Important Species and Habitats MSP GD6: Alignment of the Land-Sea Interface MSP GD7: Marine Protected Areas (MPAs) MSP GD8: Community Aspirations	
Aim Objectives THE POLICIES 1. ASSESSMENT OF DEVELOPMENT APPLICATIONS MSP GD1: General Development Policy MSP GD2: Developments in or near Sites of European Interest (SAC or SPA) MSP GD3: Developments in or near SSSIs MSP GD4: Developments in or near NSAs MSP GD5: Safeguarding Important Species and Habitats MSP GD6: Alignment of the Land-Sea Interface MSP GD7: Marine Protected Areas (MPAs) MSP GD8: Community Aspirations	

Action 2: A Pre-Application Consultation Database

	22
Oil related development	32
MSP OIL1: Energy Development Proposals	22
Renewable Energy	33
MSP NRG1: Exploratory, Appraisal or Prototype Renewable Energy Proposals	
MSP NRG2: Renewable Energy Development Proposals	
Commercial Fishing	35
MSP FI: Safeguarding Fishing Opportunities	
MSP F2: Local Management of Sustainable Fisheries	
Mineral and Aggregate Extraction	37
MSP EXI: Extraction of Sand, Gravel and Shingle	
Tourism and Recreation	39
MSP TRI: Marine Recreation	
MSP TR2: Tourist Developments	
MSP TR3: Environmental Protection as a Priority in Marine Tourism	
3. INFRASTRUCTURE & SERVICES	42
Construction Permission Framework	42
Shore Access Construction	44
MSP SA1: Shore Access	
Coastal Defence and Flood Protection	45
MSP CD1: Coastal Defence Construction	
MSP CD2: Coastal Defence Demolition	
Cables and Pipelines	47
MSP CBP1: Placement of New Telecommunication and Submarine Cables and Oil and Gas Pipelines	
MSP CBP2: Avoidance of Cables and Pipelines	
MSP CBP3: Placement of New Wastewater Pipelines	
Moorings for Individual Boats, Weather and Radar Masts, Buoys and Anchorage	49
MSP MO1: Moorings	
Transport	50
MSP TRANS1: Safeguarding Navigation Channels and Port Areas	
MSP TRANS2: Areas to be Avoided and MEHRAs	
MSP TRANS3: Future Fixed Links	
Dredging and Disposal	53
MSP DD1: Dredging and Disposal of Dredged Material	
ACTION PLAN	55
Minimising Conflict	55
Action 1: Minimising Conflict with Future Development	

Action 3: Defining the Aspirations of Communities

Using and Improving our Knowledge	56
Action 4: An Integrated Plan for Marine Monitoring	
Action 5: Setting Data Standards	
Action 6: Using the Broadscale Habitat Map	
Action 7: Creating Industry-Science Partnerships	
Action 8: Filling Seabed Knowledge Gaps	
Action 9: Identifying Marine Protected Areas	
Action 10: Filling Data Gaps	
Action 11: Developing Sub-Area Marine Spatial Plans	
Action 12: Encouraging new aquaculture developments	
Sensitivities of Marine Life	60
Action 13: Identifying Sensitive Areas	
Identifying Damaged Ecosystems	60
Action 14: Identifying and Restoring Damaged Habitats and Ecosystems	
MONITORING AND REVIEW	61
APPENDIX 1: LIST OF POLICIES AND STRATEGIES TAKEN INTO ACCOUNT IN PREPARING THE PLAN	68
APPENDIX 2: SHETLAND PARTICIPATION IN SSMEI	70
APPENDIX 3: WORKS LICENSE POLICIES FOR DEVELOPMENT	71
APPENDIX 4: USEFUL CONTACTS FOR LICENSES / PERMIT INFORMATION	73
APPENDIX 5: AQUACULTURE POLICIES EXTRACTED FROM THE INTERIM POLICY FOR MARINE AQUACULTURE, 2007	74
APPENDIX 6: MATRIX OF SENSITIVITIES	79





QUICK GUIDE

This document is designed to guide all marine users in the placement of existing and proposed activities, operations or developments. To help you navigate through this document, there are two hierarchies of policy to read and supplementary maps to consult.

- Step 1: The General Development policies provide you with the general constraints you should consider when using the marine and coastal area.
- Step 2: The next hierarchy of policy is more detailed advice appropriate to the sector / type of activity. Refer to it for specific guidance on the placement of your development / activity proposal.
- Step 3: Refer to the maps in the Marine Atlas (Part Two of this document) to advise you on important features surrounding your area of interest.

If you have a broadband connection, you will be able to open the spatial information on Google Earth™ (the files are provided on the CD in the Atlas). If you have not already done so, you will have to download a free version of Google Earth™ before opening the files on the CD. This is available at: http://earth.google.com You can also use the spatial information on certain Geographical Information Systems (GIS) that you may currently use. Please ensure you read and agree to the terms of agreement before using the spatial data.

Step 5: Ensure you are familiar with other statutory policy that apply to your activity, detailed in each section of this report, this could be Shetland Islands Council's Interim Policy for Marine Aquaculture (2007), Works License Policy, or, if there is an overlap with the land side of the High Water Mark, the Local Plan. If in doubt, check with the relevant agency listed at the back of this document.

Your use, proposal or activity

General considerations applying to all activities (pages 19 - 29)

Constraints for specific activity (pages 29 - 53)

Refer to the maps in the Marine Atlas (Part Two of this document)

Check any other relevant policy

FOREWORD

Shetland has a rich and diverse maritime heritage which has evolved and grown out of the Island's geographical remoteness and the industries and communities of fishing and, more recently, oil. Shetlanders have embraced and responded to many new opportunities which, when integrated with existing traditions and skills, has resulted in a strong and dynamic marine management ethos.



National policy on marine management is in a state of flux with UK and Scottish Marine Bills in preparation. The opportunity now exists to further augment the desire for local marine management through a more co-ordinated and robust framework that ensures the fundamental principles of sustainable development are applied to all marine activities. Whilst socio-economic and environmental factors are already integrated into a number of decision making processes, this has tended to be on a sectoral basis. As the use of valuable marine resources increases there is a need to manage more positively the potential tensions between sectors and between environmental and socio-economic prosperity.

This Marine Spatial Plan presents, for the first time, a comprehensive picture of the marine environment around Shetland. In developing the Plan a large volume of existing and new data has been collated and analysed to provide the necessary underpinning knowledge that is required for a more decisive and cohesive decision making process. In recognising that marine spatial planning is a new concept and can mean different things to different people, this Plan includes all aspects of marine and coastal resource use including fishing, aquaculture, oil, wet renewables, heritage, sport and recreation, education and the environment.

Marine stakeholder and local community input has played a major role in the development of this Plan. It is hoped that these same bodies and others will use the Plan when considering future marine development proposals so as to minimise and reduce potential conflicts of interest and build on Shetland's existing track record of effective and sustainable marine management.

7 Vence

Sandy Cluness
Convenor, Shetland Islands Council

SUMMARY

The Shetland Marine Spatial Plan brings together authoritative spatial data on the marine and coastal environment and its various uses. It establishes an overarching policy framework to guide the placement of activity, from wet renewable energy to aquaculture.

This Plan is not prescriptive about what can occur where and when in specific areas of the Islands. Rather it demonstrates what is occurring where and when, and clarifies the distribution of planning constraints and important assets that require safeguarding.

The Plan links into many other Shetland Islands Council's strategies and plans, such as the Corporate Plan and its individual departmental plans, as well as those of other organisations, for example SEPA's River Basin Management Plan. It seeks to foster shared understanding and to promote consensus as to how and where marine management can lead to community benefits and economic regeneration.

The framework is a significant component of the Scottish Government's commitment outlined in 'Seas the Opportunity' (2005) for achieving sustainability in the marine environment. The Scottish Sustainable Marine Environment Initiative (SSMEI) was initiated by the Scottish Government to inform future marine policy and test new management

framework options for Scotland's marine and coastal environment. Four pilot projects have been set up across Scotland, located in the Firth of Clyde, the Sound of Mull, Berwickshire and Shetland.

This Shetland Marine Spatial Plan forms a component of the SSMEI pilot. It should streamline the development applications process by enabling developers to identify locations that could be refused planning permission or works licensing pre-submission, which should lead to reduced delays and costs. The information efficiencies will also benefit planners and regulators, helping them make a more integrated and better informed decision regarding the future distribution of use of space and resources.

Whether the Plan adds value to the current regimes is dependent on:

- All stakeholders referring to the Marine Plan when a proposal for a new development arises.
- Developers and their environmental consultant referring to the Plan before they lodge an application for a works license or planning permission.

It is acknowledged that Marine Spatial Planning is a process which takes much longer than the time it has taken to produce this Plan: this Plan is merely the first step in achieving process objectives.



INTRODUCTION

"...the coast is not only a complex natural environment; it is also a complex policy area where a range of agencies with differing, but often overlapping, objectives, responsibilities and powers operate" (Scottish Office, 1997).

The purpose of Marine Spatial Planning is to develop a system for using the marine and coastal environment within the capacity of its ecological systems. Environmental planning frameworks must deal with uncertainty and complexity. They must be designed to be sufficiently flexible to be responsive to the requirements of unforeseen developments.

They must also simplify complexity so that lay people can appreciate the factors to be considered. This is particularly important in the maritime environment as marine information is generally quite hard won and yet must be brought to bear in good time and in such a form as to have an influence on decision makers.

Relationship to Other Strategies and Policies

There is a very wide range of strategies and policies deriving from international, national, regional and local levels. An attempt has been made to demonstrate which policies cross-link at the end of each policy, however, a full list of strategies and policies to which the plan has regard is presented in Appendix 1.

A key attribute of this local Marine Spatial Plan is that it facilitates delivery of the integration of policies and objectives across different sectors in the production of one unified plan.

The Shetland Marine Spatial Planning framework aims to achieve the integration of policies and objectives through:

- Coordination between stakeholders:
- Establishment of Plan policies to ensure sectoral policies take account of the needs of other uses and the ecosystem;
- Guidance provision to relevant stakeholders in relation to consenting issues for new developments;
- Monitoring progress towards achievement of Plan objectives.

Any development proposal must not conflict with, current Government guidance and other policies such as those in the Works License policy.

Who Will Use This Plan?

The SSMEI Shetland pilot will continue to lead a coordinated approach on the implementation of this Marine Spatial Plan until its funding ceases. Its success is dependent on its adoption by all stakeholders and its subsequent development if stakeholders.

This document is the first step in the Marine Spatial Planning process: it is a planning and decision making tool to guide development and use of the marine and coastal environment. It is therefore intended for use by all stakeholders, but will mostly include:

- National and local government, management agencies, authorities, boards and other relevant planning bodies; and
- Businesses, industrial and commercial users and researchers will also find this Plan useful in finding suitable sites for development or for the EIA process.

How Can I Use This Plan?

Step by step instructions to the use of this Plan are provided at the beginning of this report. The considerations required for a particular development or use is guided by a series of policies in this document. These direct the user to maps in the Atlas (Part Two of this document), which then directs the user to data for use with Geographical Information Systems (GIS) and Google Earth™. To improve information efficiencies in the planning process, every attempt has, and will continue to be made to provide the appropriate data in a format that suits everybody.

Process of the Plan Production

The Shetland framework has been informed by stakeholder participation throughout the draft plan stage (listed in Appendix 2) and a public consultation on this (the processes of which have been summarised in a previous report, Interim Review of the Shetland SSMEI Pilot, 2008). The framework adopts the principles of the ecosystem approach (see Box 1 for a definition), and provides for the:

- · development of an overarching Marine Spatial Plan;
- existing and future development and use to have regard to this Marine Spatial Plan;
- evaluation of the impact of the Marine Spatial Plan through Strategic Environmental Assessment; and
- aspirations for the future of Marine Spatial Planning in Shetland through an Action Plan.

The Future of Marine Spatial Planning

The Government has suggested that commitments to Marine Spatial Planning will assist with the integrated, multiple use and management of the coast and marine environment by providing specialist management, understanding and knowledge. It is anticipated that future legislation will provide a statutory basis for Marine Spatial Plans, and will interact with, and inform any subsequent strategies, plans and policies that may arise.

The Scottish Government hopes that the outcome of this and the other SSMEI pilots will be influential in the development of Scottish Marine Regions models, as detailed in the Marine Bill.

The final section of this Plan details the aspirations for local Marine Spatial Planning in Shetland through an Action Plan. This has been developed for the SSMEI pilot to work through with appropriate stakeholders. The knowledge gained from completing these actions will eventually feed back into the local policy framework.

Geographic Coverage of the Plan

The coastline was measured for the first time since 1975: the coastline of the Shetland Islands is 2,702 km (1,697 miles), the equivalent of 10% of Scotland's coastline (based on MLURI, Macaulay Institute figure of 16,491 miles). The original measurement was estimated to be 1,450 km (Flinn, 1975), almost half the revised extent. This large differential could be explained by advancements in Geographical Information Technology. The recent Shetland coastline was measured using the tide level of the Mean High Water Spring (MHWS) extracted from the Ordnance Survey MasterMap® using GIS software (scale 1:1250). This coastline was based on satellite imagery and the new measurement therefore includes all lengths of coast such as skerries and stacks, which were probably not included in the 1975 estimation.

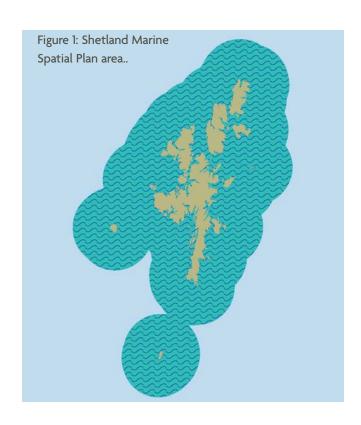
The planning area includes all territorial waters seaward of the Mean High Water of the spring tide, out to 12 nautical miles but includes habitats / ecological processes that are clearly affected by marine use. Archeological features within 150m of the coastline have also been included. The area is the equivalent to 10,580 km²(3,899 miles²); almost seven times the land area of the Shetland Islands.

The landward extent of the coastal zone varies considerably, but in general is determined by the extent to which it is affected by coastal processes. This boundary was set to include a major proportion of the salt marsh and sand dune areas. Salt marsh and sand dunes are significant coastal habitats being of international importance. Salt marsh habitats are usually inundated by seawater at least once a year when tides are at their highest. Both are important for inclusion as they serve as nursery and feeding habitats for a wide diversity of species.

Box 1: The Ecosystem Approach

A strategy for the integrated management of land, water and living resources that promotes conservation and sustainable use in an equitable way.

(Convention on Biological Diversity, 1992)



Planning and Regulatory Authorities' Roles and Responsibilities

The aspiration of Marine Spatial Planning is such that it must be consistent with other plans and strategies and statements of policy at a higher level. The Marine Spatial Plan meshes with other statutory plans generated by or through other planning and regulatory authorities, such as the consenting body SEPA, who also co-ordinate the national process to achieve the objectives of the EC Water Framework Directive through the production of River Basin Management Plans (RBMP). The area covered by the RBMP process is inland waters as well as coastal waters out to 3 miles. The local area plans are stakeholder-led by the Orkney and Shetland Advisory Group, which the SSMEI pilot participates in to ensure the two projects come together efficiently. Details of the role of the Advisory Group can be found at:

http://www.sepa.org.uk/wfd/rbmp/aag/orkshet/index.htm

All current versions of National Planning Policy Guidelines (NPPGs), now being replaced by Scottish Planning Policy (SPPs), and associated Planning Advice Notes (PANs) together with the National Waste Plan were taken into account in the preparation of this Marine Spatial Plan, which is considered to be compatible with them.

Shetland Islands Council has an obligation to produce Development Plans: the Structure Plan provides the islands' strategy for land use planning until 2015, and the Local Plan looks 10 years ahead, but is reviewed every five years. These Plans' policies are already well developed for planning above the tide level at Mean High Water Spring (MHWS), which will continue to be the main source of policy guidance for this area. The Shetland Marine Spatial Plan policies therefore focus on ensuring that existing and future development does not adversely affect marine use and ecosystems. It is therefore suggested that due consideration should be given to this Marine Spatial Plan in any future reviews and updates [The Town and Country Planning (Marine Fish Farming) (Scotland) Order 2007 came into force on 1 April 2007 and replaced the previous Works License system (which is still valid for other developments). It should further be noted that under planning reform and modernisation, which will commence in January 2009, there will be only one Development Plan, the Local Development Plan, for terrestrial land use and marine aquaculture interests in Shetland. This will be updated on a regular 5 year basis and an associated Action Plan will be reviewed every two years].

This Marine Spatial Plan recognises that many uses and developments are governed by statutory regulations and these will be unaffected by this plan. However, this pilot will influence future Marine Spatial Planning as indicated in the Marine Bill which is likely to be statutory and place legal duties on public bodies to 'act in accordance' with the Shetland Marine Spatial Plan. The implementation of the current plan may reveal ways in which current regulations could be amended, or applied differently in future.

Accordingly, if stakeholders respond to the policies outlined in the Shetland Marine Spatial Plan, this will provide a sound basis to develop and facilitate a more effective response of the pilot to the Scottish Government.

Monitoring and Review

The impact of the Plan will be examined by an on-going process as part of the SSMEI pilot. It will play a key part in assessing the effectiveness of Plan policies, which in turn feeds in to further development and review of the Plan.

Further to this review, it is a relatively new requirement for plans such as the Marine Spatial Plan to undergo a formal assessment of its environmental effects. This requirement arises from a European Directive 2001/42/EC which affects all the member states across Europe. In the UK, the Directive has been transposed into law through



Image courtesy of Kenny Gifford

the Environmental Assessment of Plans and Programmes (Scotland) Regulations 2004 (and subsequently the Environmental Assessment (Scotland) Act 2005 which was not enacted in time to affect this current plan).

The Marine Spatial Plan is however a voluntary pilot and therefore SEA of the Plan is not currently legally required. However it was considered that it would be desirable to follow best practice and demonstrate the environmental benefits of the Plan.

It is anticipated that the Plan will benefit from undergoing the assessment, and the Review of the Plan will suggest various changes to ensure that there are minimal negative environmental effects and that positive effects are maximised.

Forthcoming Sub-Area Marine Spatial Plans

During the creation of a remit for the Shetland SSMEI pilot, it was agreed that a set of more detailed local plans will be produced relating to marine systems where competition for resources exists. One sub-area Plan will be developed for Fair Isle where the local community desire statutory objectives for the surrounding marine and coastal environment (i.e. it considers specific community aspirations). Another sub-area Plan will be established for an intensively used area on the Shetland mainland, to explore options for development potential and aspirations for existing industry in an area. It is anticipated that these plans would need to be developed where the conflicts and issues require a more focused set of

Puffins at Sumburgh Head

Image courtesy of Stephan Hennig

objectives and targets compared to this 'overarching' Plan. It is also likely that the different scales of Plan will highlight implications for detail of data and therefore resource planning in other areas.

Whilst these policies will be applied to future developments and uses, the aspiration is to adapt existing uses and management to these too. Pressure points have been, and will continue to be mapped during the production of this Plan. Subsequent application of this will involve a review of current practices that guide development and/or activities in these high pressure areas.

Maintenance of Data and Information

A wealth of information has been collated and created during the production of this Plan. A database has been created which states when data requires updating, but of course this is limited by the resources of the SSMEI pilot. Due to the limited skills base and time within the different sectors to maintain this spatial information the Shetland Isles MSP steering group will, over the course of the plan's timescale, consider the appropriate method to maintain this database in GIS.

VISION, AIM AND OBJECTIVES

Following the establishment of a Local Steering Group, the 18 members shared a vision and set an aim and objectives for the management of Shetland's marine environment.

Vision

Shetland's vision for the marine and coastal environment is one that is clean, healthy, safe and productive, managed to meet the long-term needs of nature and the local people.

Aim

Ensure that use of the marine and coastal environment of Shetland is sustainable *

*Sustainable use will enable dynamic economic activity supporting a prosperous community whilst maintaining and enhancing marine wildlife, habitats and ecosystems. Sustainable use should not lead to loss of biodiversity or ecological balance, or reduce the availability of natural resources for future generations.

Objectives

The objectives of the Marine Spatial Plan as a mechanism of achieving the aims are to:

- 1 Ensure a high quality, fully functioning marine and coastal ecosystem for the benefit and prosperity of local communities;
- 2 Protect and enhance areas where there are locally, nationally or internationally important marine species and habitats whilst taking account of natural changes;
- 3 Identify areas with differing priorities for sustainable use (such as fishing, aquaculture, recreation & tourism, oil, nature conservation etc.); and
- 4 Ensure that stakeholders can take advantage of development opportunities in a sustainable way.

The vision, aim and objectives have driven the development of this Marine Spatial Plan.

Additional local objectives were established by the Steering Group that address the longer-term aspirations of Marine Spatial Planning and these are detailed in the Action Plan of this document.



THE POLICIES

The Principles of Sustainable Development

The policies in this report have been established in recognition of Shetland's objectives for Marine Spatial Planning and the commitment to sustainable development of which the key principles taken from "One future - different paths, UK shared framework" are:

- Living within environmental limits
- Ensuring a strong, healthy and just society
- · Achieving a sustainable economy
- Promoting good governance
- Using sound science responsibly

At all times all stakeholders should endeavour to balance these aims to ensure the Marine Spatial Plan's policies are equally promoted.

The recognition of sustainable development as one of the key underlying principles of the Marine Spatial Plan requires the application of the precautionary principle. Whilst much can be done to assess the full implications of a development proposal there may be instances where the scientific evidence is inconclusive, but the potential damage could be significant.

Environmental Impact Assessment

Much can be done to assess the full implications of a development proposal. The potential impact of varying types of proposed developments can be assessed by undertaking more detailed and specific impact assessments. The best known of these is the Environmental Impact Assessment (EIA) which identifies the environmental effects of development proposals. For the development of certain types of projects, there is a statutory requirement to produce an EIA. Other impact assessments may cover issues such as retailing and transport.

Navigating Through the Policies

This document is designed to guide all marine users, planners and regulators in the placement of existing and proposed activities, operations or developments. To help you navigate through this document, there are two hierarchies of policy to read and supplementary maps in the Marine Atlas to consult. A developer, for example, is encouraged to use the polices and maps before a planning application is submitted to the relevant authorities. This is very much in keeping with new planning legislation.

The first hierarchy of the policies establish some general considerations, the main principle being to identify the needs of other users, thereby attempting to reduce any conflict.

The subsequent two sections, "Business & Industry" and "Infrastructure & Services", guide where different priorities should occur based on aspirations of the Local Steering Group who led the development of the Plan and the specific legislation to that sector.

These polices are designed to dovetail into the Scottish Government Economic Strategy to make Scotland wealthier and fairer; smarter; healthier; safer and stronger; and greener.

1. ASSESSMENT OF DEVELOPMENT APPLICATIONS AND ACTIVITY

There is a plethora of roles and responsibilities undertaken by different government bodies within the marine and coastal environment. Below the Mean High Water Spring (MHWS), statutory controls mostly operate on a sectoral basis. Regulated activities include aquaculture, aggregate extraction, shipping, oil and gas development, cables and pipelines, coastal defence, fisheries, recreation and increasing activity in renewable energy sites.

The term "development" in this report, and henceforth, includes activities and operations such as fishing, recreation and shipping.

GENERAL CONSIDERATIONS

Policy MSP GD1:

General Development Policy

Developments could be looked on favourably where they can demonstrate that they will not have a significant adverse impact on the following sectors:

Heritage

This includes, but is not limited to:

- Designated sites (SPA, SAC, SSSIs, Ramsar, NSA);
- Species and habitats that are statutorily protected;
- the aims of UK or Shetland Biodiversity Action Plans;
- Landscape including Landscape Carrying Capacity; and
- Archaeology (Scheduled Ancient Monuments, ship and plane wrecks, and unscheduled monuments).

Community

This includes, but is not limited to:

• Community aspirations;

Business & Industry

This includes, but is not limited to:

- Oil related development;
- Tourism and recreation;
- Aguaculture
- Renewable energy;
- Commercial fishing; and
- Sand, gravel and shingle extraction (not mapped)

Infrastructure & Services

This includes, but is not limited to:

- Shore access;
- Cables & pipelines;
- Dredging and disposal;
- Transport and fixed Links;
- Coastal defence and flood protection;
- Buoys and navigational aides;

In addition, developments could be considered favourably where they have taken into account:

- Particularly sensitive species and habitats as detailed in the Matrix of Sensitivities in Appendix 6;
- Impact on the land side of the development;
- Individual and cumulative effects on the built, natural and cultural heritage;
- Effects of, and effects on, climate change;
- Wider impacts on ecosystem functioning;
- Effects on coastal erosion and sediment transport;
- Public health and safety;
- Noise and disturbance issues:
- Suitable site restoration proposals; and
- Need for the development, what alternatives are and why existing facilities are inadequate.

Justification

Marine Spatial Planning requires local Plans to set out detailed policies for the development and use of the sea in order to guide day-to-day planning decisions. The purpose of this General Development Policy is to provide a basic framework of guidance in the assessment of all marine activities, including not just planning applications or prior notifications, but unlicensed activities such as shipping and fishing. It aims to ensure that all use is of satisfactory quality, efficient in its use of resources, and is well integrated into its surroundings in physical and visual terms.

Definitions

All marine management decisions will have considered, as a minimum, all the criteria in Policy MSP GD1 when determining spatial use of the sea. The maps included in the Marine Atlas detail the spatial extent of the different activities occurring for the purpose of reducing conflict between users.

Further to these mapped constraints is the need for all users to consider wider impacts from, for example, climate change: storm events and sea level rise are predicted to be significant in Shetland and this may restrict the location, scale and type of development.

Another constraint a marine user will have to consider is the impact from pollution of coastal and transitional waters by any contaminants associated with the land or likely discharge from the proposed development or activity, in particular its effect on the cumulative coastal water body status (shown in map 28 of the Marine Atlas).

Marine developers must consider their wider impacts on the environment, and this will be implemented by screening applications to determine whether they have suitable site restoration proposals: this could include plans for habitat restoration by, for example, promoting community involvement through schools and volunteer groups. Other considerations that could be included is the creation of compensatory areas i.e. habitat banking/ creation.

Developers must also shown to the satisfaction of the Planning Authority that plans include the removal of redundant plant and equipment and the assurance that any deposits of waste are agreed at the application stage.

NATURE CONSERVATION SITES

Background and issues

Shetland has both national and international obligations with regards to nature conservation. The sound stewardship of wildlife and natural features is not a task for government alone, but also depends on the decisions made by those who influence the development and use of the sea and coast. One of the keys to conservation of wildlife and the maintenance of biodiversity is seen to be the protection of the habitat on which it depends. While certain species may have been given statutory protection, the thrust of government policy has been towards the protection of habitat.

Sites which are currently designated because of their nature conservation importance are identified in Map 13 of the Shetland Marine Atlas. International sites are those with protection under European law - Special Protection Areas (SPAs) designated under the EC Wild Birds Directive and Special Areas of Conservation (SACs) designated under the EC Habitats Directive. SPAs and SACs taken together are commonly known as Natura 2000 sites. Natura sites are designated under the Conservation (Natural Heritage &c.) Regulations 1994. There are currently 12 SPAs for seabirds, 5 SACs with a marine element.

Additionally wetland areas are protected under the Ramsar Convention on Wetlands of International Importance, in Shetland there is 1 Ramsar site. For sites which qualify under the Ramsar convention but are not SACs or SPAs, the Scottish Executive has chosen as a matter of policy to apply the same considerations to their protection as if they were SPAs.

National sites include Sites of Special Scientific Interest (SSSI). There are 82 designated SSSIs in Shetland, including 30 with coastal geology as a notified feature.

There are currently four Marine Consultation Areas (MCA): Brindister Voe, Swinister Voe, The Houb (Fugla Ness) and Whiteness Voe. A MCA is a non-statutory designation intended to assist in the protection and conservation of marine areas which are of high conservation value but not otherwise designated.

Further sites outwith these designated areas have been identified as being of local importance to wildlife or to exhibit features of local natural heritage interest because they host statutory protected species and habitats. These are shown in maps 16 - 26 of the Shetland Marine Atlas.

While national and international sites represent the "best" of Shetland's environmental capital, these tertiary sites contribute to the diversity of sites which makes Shetland so important for nature conservation.

Natural heritage is not confined to the primary statutorily designated sites but is found throughout the marine and coastal area. Statutory and non-statutory sites, together with features which provide wildlife corridors, links or stepping stones from one habitat to another, all help to form a network necessary to ensure the maintenance of the current range and diversity of our flora, fauna, geological and landform features and the survival of important species. The most threatened of the natural heritage sites are those with no statutory protection.

The Shetland Biological Records Centre housed within the Shetland Amenity Trust provides an invaluable source of information for planning staff and developers in assessing whether any habitats or species are likely to be affected by development proposals, particularly important when assessing whether a sensitive time of a species' life cycle might be affected that would restrict construction / development occurring at certain times of the year.

Current procedures for assessment of development in or near sites with international nature conservation designations (including Natura 2000 sites)

Development not directly connected with or necessary to the management of a Natura 2000 Sites or a proposed Natura 2000 Sites, and which is likely to have a significant effect on the site (either individually or in combination with other plans or projects), will be subject to the most rigorous examination.

Appropriate Assessment (AA) is a legal requirement for all authorities that can consent development or activity and determines whether these would significantly affect the integrity of Natura 2000 Sites. Should an Appropriate Assessment indicate that a development will have an adverse effect on the integrity of any Natura 2000 site, Shetland Islands Council will be minded to refuse the application as required by the 1994 Regulations. Additionally the Council will take proper account of Articles 12, 13 and 16 of the Habitats Directive in respect of European protected species when considering planning applications.

As the Scottish Government's natural heritage advisors SNH consider the AA and indicate whether they agree with its

conclusions or not. Where it cannot be ascertained that the development would not adversely affect the integrity of the site it will not be permitted unless:

- a. there is no alternative solution; and
- b. there are imperative reasons of overriding public interest which may, for sites not hosting a priority habitat type and/or priority species, be of a social or economic nature.

Where the Natura 2000 site hosts a priority habitat type and/or a priority species (as defined in Article 1 of the Habitats Directive and shown in map 13), the reasons referred to at b) must relate to human health, public safety or beneficial consequences of primary importance to the environment, or other reasons which in the opinion of the European Commission are imperative reasons of overriding public interest.

Policy MSP GD2:

Developments in or near Sites of International Interest (SACs, SPAs and Ramsar)

Development likely to have a significant effect on a site designated or proposed to be designated as a Special Protection Area, Special Area of Conservation (collectively known as Natura 2000 sites) or a Ramsar site and not directly connected with, or necessary to the conservation management of that site must be subject to an Appropriate Assessment as required by the Conservation (Natural Habitats etc.) Regulations 1994 or the Scottish Executive Circular No. 6/1995, in order to assess the implications for the site's conservation objectives. The development will only be permitted in circumstances where the assessment indicates that:

- i. it would not adversely affect the objectives of the designation or the integrity of the site; or,
- ii. there is no reasonable alternative solution; and,
- iii. there are imperative reasons of over-riding public interest, including those of a social or economic nature.

Except for development involving public health or safety, the European Commission must be consulted for development on all sites where a priority habitat or species (as defined by Article 1 of the Habitats Directive) would be affected.

Where the competent authority proposes to give consent for development which would adversely affect the integrity of such a site the Scottish Government must be notified.

Policy MSP GD3:

Developments in or near SSSIs

Development likely to have a significant effect on a Site of Special Scientific Interest or designated nature reserve will only be permitted:

- i. if there is no impact on the special interest of the site or it can be subject to conditions that will prevent damaging impacts on wildlife habitats or important physical features: or,
- ii. where there is no reasonable alternative or less ecologically damaging location and the reasons for the development clearly outweigh the value of the site by virtue of social or economic benefits of national importance.

Definitions

It should be noted that Shetland Islands Council has a duty to assess the implications of development proposals "within" and "near" SACs and SPAs for their implications on the integrity of the sites. Development proposals outwith Natura 2000 sites may therefore be subject to this policy. Effective mechanisms control activities within designated sites but their wildlife interest can often be damaged by operations outwith their boundary. It is important that planning decisions take account of possible effects on designated natural heritage sites even though these may be some distance from the development site.

For a proposal to be considered directly connected with or necessary to the conservation management of the site, it must be in accordance with the conservation objectives of the site for European interests. On a multi-interest site, a proposal which may benefit one interest may be contrary to the conservation objectives for another interest, and should therefore be subject to a full appraisal.

Examples of over-riding public interest might include the following:

- a regional economic development opportunity which generates in excess of 50 full-time equivalent jobs;
- works required for public safety, or for the safety of aircraft, road traffic or shipping; or,
- works necessary in the interests of national security.

Implementation and Monitoring

Policies GD2 and GD3 will be implemented by the screening of all applications to determine whether they affect, or are likely to affect, any of the designated sites. Developers will be asked to show that there is no significant impact through the production of an environmental statement or impact assessment. Scottish Natural Heritage and special interest groups including the Royal Society for the Protection of Birds will also be asked for their views on development proposals.

Shetland Islands Council maintains a record of all sites referred to above, representing their position at that time. However, designations are prone to change over time as new sites are discovered and existing sites reviewed. Advice should therefore be sought from either the Council or Scottish Natural Heritage to obtain the current situation at any given time.

Monitoring of policy GD2 and GD3 will be through:

- the recording of incidence where applications approved affect designated sites; and
- quantitative indicators will be used to assess changes in the quality of sites over time where these are currently recorded.

LANDSCAPE

National planning policy requires that local Plans include policies for the protection and, where appropriate, the enhancement of nationally designated areas; and for any other areas identified as being of regional or local importance for their natural heritage. These designated areas along with other parts of Shetland represent landscapes which could in themselves be considered tourism assets and which should be conserved for the benefit of this industry. The purpose of the policy is to provide adequate protection for national and locally important scenic areas in Shetland.

The quality of Shetland's landscape has been recognised by the designation of a National Scenic Area (NSA). Seven separate small areas of coastal landscape in Shetland have been identified as of outstanding scenic interest. They lie principally in the south-west and northern extremities of the archipelago and include Fair Isle, Foula, the western flank of Dunrossness and the Deeps, part of Muckle Roe, Esha Ness, Uyea Isle and Fethaland, and Herma Ness.

Policy MSP GD4:

Developments in or near NSAs

All development proposals should ensure a high standard of design, in terms of siting, scale, colour, materials and form to ensure the various types of development or coastal use change might best be accommodated within particular landscape and seascape types.

Development or coastal-use change that may have a significant adverse effect, either directly or indirectly will only be permitted where the quality or character of the landscape will not be adversely affected; or, where any significant adverse effects on the National Scenic Area are clearly outweighed by social or economic benefits of national importance. Where necessary development proposals will be referred to SNH for consultation.

Implementation and Monitoring

NSAs are nationally important areas of outstanding natural beauty within which stricter control of development is enforced. Applications for planning permission or Works License within the seaward extent of these areas will need to exhibit greater consideration of siting and design issues than in other areas.

All Planning applications and Works Licenses falling within these areas (on the seaward side) will be monitored by:

- scrutiny of the seascape carrying capacity;
- seascape enhancements will be sought through the imposition of conditions and by planning agreements; and
- the recording of incidence where applications approved affect landscape.



SPECIES AND HABITATS

National planning policy requires that Local Plans make provision for the conservation of biodiversity and the protection and enhancement of the natural heritage outwith designated areas. Features of natural heritage interest are not solely confined to designated sites, and the Marine Spatial Plan recognises the need to maintain and enhance the status of key habitats and species.

Policy MSP GD5:

Safeguarding Important Species and Habitats

a) Species and Habitats

Development will not be permitted that would have a significant adverse direct or indirect effect on any species of animal (or their actively used breeding, feeding and roosting habitats) or plant or habitat protected under;

- i. EC Habitats Directive (Annex I, II, IV and V): of relevance in Shetland are maerl beds, horse mussel beds and eelgrass beds (map 16a and 16b), lagoons and shallow inlets and bays (map 17), rare plants, sand dunes, and caves (map 18), salt marsh (map 19), all cetacean species (map 20), otter, common seals and grey seals (map 21);
- ii. EC Birds Directive (Annex I and Migratory Species):
 of relevance in Shetland are Great Northern Diver,
 Slavonian Grebe, Storm Petrel, Leach's Petrel,
 Common Tern and Arctic Tern (maps 22 and 23);
- iii. OSPAR list of threatened and / or in decline species and habitats: of relevance in Shetland are native oyster, common mussel beds, and mud in deep water (seapens) (map 25);
- iv. the Wildlife and Countryside Act 1981 as amended (from schedules 1, 5, and 8): of relevance in Shetland are Harbour Porpoise (map 20);
- v. Biodiversity Action Plan (UK and Local): of relevance in Shetland are sheltered muddy gravel (map 25), mudflats (map 19) and kelp forest (map 26); and
- vi. Birds Of Conservation Concern: of relevance in Shetland are Cormorant, Common Eider, Long-Tailed Duck, Red-Breasted Merganser, Black Guillemot, Puffin, Manx Shearwater, Gannet, Shag, Mallard, coastal breeding and wintering waders Arctic Skua, Great Skua, Lesser Black-Backed Gull, Herring Gull and Razorbill (maps 22, 23 and 24).

Whilst sensitive times of the year have been indicated on

the maps in the Marine Atlas, early consultation on actively used sites for species such as birds, otters, seals and cetaceans is advised. Applicants and planners should seek advice from the Shetland Biological Records Centre and Scottish Natural Heritage.

b) Replacement Features (Planning Compensation)

If a development is occurring or proposed to occur which may be liable to harm features of nature conservation, interest or impact on a species protected under British or European law, or are listed as a priority in the Local Biodiversity Action Plan, a judgement will be made by the planning authority as to whether the creation of a replacement habitat of equal habitat value should be imposed as a planning obligation.

c) Undiscovered Features

If important new features of nature conservation interest are discovered, development will not be permitted unless it safeguards the features, or the importance of the development outweighs the value of the features. This includes important habitats and species that are not mapped, including: Vegetated shingle (EC Habitats Directive), Vegetated sea cliffs (EC Habitats Directive), and rare seaweeds (LBAP).

Justification

These policies aim to secure the conservation of Shetland's natural heritage through the protection of habitats at all levels from injurious development. This includes ensuring that species with protected status under British or European Law are not caused harm from developments which may affect their feeding, resting or breeding sites, even if these are not in themselves considered to be habitats worthy of protection.

For the first time, data on protected species and habitats outwith designated areas have been brought together from various sources into maps using Geographical Information Systems (GIS). This spatial information should be used by developers preconsultation to avoid any objections to the Planning or Works License application (which will prompt the request for the marine user to show that there is no significant impact through the production of an environmental statement or impact assessment).

Implementation and Monitoring

Where an application for Planning Permission or a Works License is thought likely to decrease the value of a site of natural heritage importance, the developer may be required, through condition and/or agreement, to prepare a management plan that will show:

- how work will be conditioned to ensure potential damage to any existing habitat is minimised;
- the long-term aims of the proposal and how it is to be achieved; and
- how they aim to ensure that the development provides for the creation or enhancement of habitat features.

Monitoring of this policy will be through:

- recording the number of applications approved which may affect important species; and
- assessing those which, despite affecting sites of natural heritage importance, have made provision for habitat creation or enhancement; and
- quantitative indicators will be used to assess changes in the population levels of species over time where these are currently recorded.

It is acknowledged that some of the information in the maps is incomplete and it is for these reasons that pre-application consultation with a natural heritage advisor such as SNH, RSPB and the Biological Records Centre is recommended. Efforts will be made to fill these knowledge gaps in the future (as detailed in the Action Plan of this report).

These policies conform to:

- NPPG 5, 13, 14, and 18
- Structure Plan policies GDS1, GDS4 and SP NE4, NE7, NE8
- Regional and Local Biodiversity Action Plans
- Local Plan policies LP NE10, NE 13, BE8, BE9.

These policies support:

- The SIC Corporate Plan
- Development Plan Aim 1, 2, 3 and 4
- Biodiversity: The UK Action Plan
- Safeguarding our Seas A strategy for the conservation and sustainable development of our marine environment.

Marine Protected Areas (MPAs)

Policy MSP GD6:

Establishing Marine Protected Areas (MPAs)

Proposals to establish Marine Protected Areas will be explored and supported provided they are:

- a) fulfilling one or more of the following four requirements:
 - established to deliver Scotland's contribution to European and international commitments, such as the Natura network or the establishment of a coherent network of marine protected areas, as required by WSSD, OSPAR and by the European MSFD
 - are developed for the purpose of demonstrating or carrying out research on particular management approaches
 - established to deliver national and local priorities
 e.g. are important in a Scottish or local context but
 not protected under EU or international law
 - initiated by local communities and can be shown to bring benefits to those communities
- b) supported by a sound scientific baseline and justification
- c) subject to full public consultation

Additionally:

d) All proposals should consider the potential socioeconomic and community impacts (both positive and negative) of establishing the MPA.

Justification

Marine protected areas are one management tool which can:

- protect areas of threatened species and habitats to help ensure biodiversity is not lost as a result of widespread damaging activities,
- protect areas of representative species and habitats to help ensure that they do not become threatened as a result of human activities,
- provide some relatively unaffected areas of high biodiversity value to support the structure and functioning of the wider marine ecosystem.

MPAs have been used for fisheries management and for nature conservation, but they can also be established to provide multiple benefits. In the UK, MPAs have primarily been set up to help conserve marine biodiversity, in particular species and habitats of European and national importance. The main types of MPA in the UK are Special Areas of Conservation (SACs) for habitats of European importance and Marine Nature Reserves (MNRs) for nationally important habitats and species. There are also a number of voluntary and nonstatutory MPAs such as Marine Consultation Areas. It has also been proposed that Special Protection Areas (SPAs), currently a land based designation to protect important bird species, should be extended into the marine environment. Additionally under the OSPAR Convention and World Summit on Sustainable Development (WSSD) Scotland has international obligations to develop further MPAs.

For MPA to be effective it is important their location, size, characteristics, ecological significance and degree of acceptance are fully considered. It is therefore important that designations are based on sound scientific information and full public consultation is undertaken.

The proposed Marine Bill supports the development of MPA however the legislation for this is still to be finalised. It is anticipated that this policy will therefore change and develop as the legislation for the Marine Bill is brought into force.

These policies support:

- OSPAR Convention
- World Summit on Sustainable Development (WSSD)
- EU Marine Strategy Framework Directive
- EC Habitats Directive

Background Reading:

- DEFRA information on MPAs www.defra.gov.uk/marine/biodiversity/protectedareas.htm
- JNCC information on OSPAR MPAs www.jncc.gov.uk/page-3370
- UK Marine Protected Areas Centre www.ukmpas.org/
- Marine Bill consultation www.scotland.gov.uk/Publications/2008/07/11100221/0

THE LAND-SEA INTERFACE

Policy GD7:

Alignment of the Land-Sea Interface

The marine planning department will maintain regular and on-going liaison with the land planning department to align policy implementation for proposals occurring across the land-sea interface to ensure the effective implementation of the Marine Spatial Plan and the Shetland Local Plan.

Justification

Integrated Coastal Zone Management (ICZM) is the adoption of a management process that is intended to facilitate a more integrated approach to the use, development and protection of resources across the land/sea interface and in the near shore zone. Shetland has a clear advantage over other areas in Scotland because the local authority has had powers to determine consent applications for certain coastal and marine developments for the past 34 years under the ZCC Act (1974).

It is important however that changes made to marine planning in this document are considered within this team alongside other changes being made to planning structures on land, and are made to work effectively with them, and conversely for marine management to give proper consideration to land planning.

The aim of this policy is to clarify that some developments on the land-sea interface will need to be considered with the assurance that the proposal does not conflict with policies and aspirations of the Shetland Local Plan and that they will need to comply with both marine and land based policies. Developments between mean high water and mean low water must be considered under both the Town and Country Planning (Scotland) Acts and ZCC Act. In addition, other developments may have both sea and land based elements.

Considerations might be to ensure:

- no adverse effect on the natural heritage, landscape, amenity and general appearance of the countryside and coast;
- there is adequate and appropriate parking and suitably sized roads to manage increase in traffic;
- proposals endeavour to be sited near public transport corridors, i.e. ferry / bus / air routes; and
- the design is of high quality adding to and reflecting the character and amenity of the local area.

These policies conform to:

 Town and Country Planning (Scotland) Act 1997 and the Planning &c (Scotland) Act 1996

These policies support:

• The SIC Development Plan

COMMUNITIES

Policy MSP GD8:

Community Aspirations

Encouragement will be given to developments and activities that promote and support sustainable communities:

- a. With a culture of maritime enterprise, providing the right economic conditions for businesses to achieve dynamic and sustainable growth; and
- b. In achieving aspirations for their locality.

Competent authorities will seek to involve communities in the planning process in order to make more informed decisions.

Justification

The aim of this policy is to help the people and marine related businesses of Shetland to achieve their full potential on a long term, sustainable basis. Efforts will be made to define community aspirations (as detailed in the Action Plan of this report).



ARCHAEOLOGY

The sea around the Shetland Islands hosts a rich and diverse cultural heritage. At the coast there are numerous structures of Archeological and historical interest (shown in map 7). There are 1490 shipwrecks on the seabed that we know of (shown in map 27), but only a small proportion are known in detail. Two of these are designated under the Protection of Wrecks Act 1973 and the seabed around 14 of these wrecks is leased by Shetland Islands Council as a means of protecting the resources within them (shown in map 11)*. The seabed is also of palaeoenvironmental interest, particularly areas that were once dry land during ice age conditions and where there is potential for a wide range of buried deposits of Archeological interest.

An executive agency of Scottish Government, Historic Scotland takes the lead in providing statutory protection for the most important elements of Shetland's coastal and marine historic environment through the scheduling of ancient monuments, the listing of historic buildings, and the designation of historic shipwrecks under the Protection of Wrecks Act 1973. In addition, Historic Scotland directly manages several Properties in Care (PiC) that fall within the scope of this Plan (e.g. Jarlshof; Mousa Broch).

Shetland's archaeology is a key part of what gives the islands their own distinctive and unique character. This includes Scheduled sites but also includes many other sites which are of schedulable quality as well as sites of Regional and Local importance. Shetland Amenity Trust has a responsibility to maintain a constantly evolving record of them. This is known as the Shetland Sites and Monuments Record (SMR). The Record currently holds information on 8000 sites, a high proportion of which are coastal/marine. Activities potentially conflicting with archaeology have to take archaeology into account as a dominant use for cultural and historical reasons. Therefore, in the case of conflicts, because sites are fixed, other uses are secondary.

- * The following extract describes the protection afforded by Shetland Islands Council:
- "The council leased from the Commissioners of Crown Lands the seabed rights of specified areas where some of the more important wrecks are known to lie. Such a lease does not give the council any rights to the individual wrecks in question, but it would give that body control to prevent any person interfering with the seabed within the defined areas. And since the ships themselves are broken and scattered and their remains can only be reached by excavation the interference need not be stressed." Henderson (1985).

Policy MSP GD9:

Safeguarding Archeological Remains

In considering applications for new developments, there will always be a presumption in favour of preserving the archaeology. The Planning Authority will presume against any development that will result in the demolition of the feature, their setting and any features they may possess or would otherwise harm its character or setting of any Archeological remains, including, but not confined to:

- Scheduled Ancient Monuments;
- Historic plane wrecks;
- Designated wrecks;
- Any associated buildings (such as bods, piers and sea walls);
- Protected wrecks; and
- Unscheduled monuments.

Alterations or extensions to, and new developments within the vicinity of the above must respect the original structure in terms of design, scale and, where appropriate, setting. In granting consent to demolish, the Planning Authority would act on the advice of the Regional Archaeology Service. Any proposal to demolish the above protected infrastructure will need to be supported by a marine engineer's report indicating that the structure cannot be retained. Particular attention should also be paid to the following factors:

- a. the importance of the structure;
- b. the adequacy of efforts made to retain the structure in use:
- c. the extent to which the community would benefit from preservation.

In cases where the Planning Authority is minded to grant consent to the demolition of any of the above structures, it will consider attaching conditions in respect of:

- d. any munitions enclosed within the structure;
- e. methods of demolition to be employed;
- f. appropriate and satisfactory provision has been made for the excavation, recording, analysis and publication of the remains, and for the notification of any finds to the appropriate authorities;
- g. the conservation, retention or salvaging of architectural or other features, artifacts or other materials; and
- h. the restoration or redevelopment of the site including specifying that redevelopment contracts need to be approved prior to the commencement of demolition, in appropriate cases.

Justification

The aim of this policy is to provide protection to marine archaeology in accordance with current guidance and legislation. Marine archaeology makes a significant contribution to the character and amenity of Shetland. They are a valuable resource that can stimulate enjoyment of the wider environment and act as an important medium for education, recreation and tourism. As such, they must be protected. To help assess proposals affecting marine archaeology the views of the Archaeologist at the Shetland Amenity Trust and Historic Scotland will be sought.

This policy conforms to:

- PAN 42 and 53
- SP P 23, NPPG 13, 18 and 5
- The Memorandum on Listed Buildings and Conservation Areas (Historic Scotland)
- Structure Plan policy SP BE1
- Local Plan policy LP NE10.

This policy supports:

- The Corporate Plan
- Development Plan aim 3.

Legislative responsibilities:

· Scottish Government through Historic Scotland.

Inspection, Enforcement and Control:

- Shetland Amenity Trust (Archaeology) and Historic Scotland (Monument Wardens) - monitor the condition of Scheduled Monuments.
- Shetland Amenity Trust (Archaeology) provides advice to the Shetland Islands Council's Planning Department under a Service Level Agreement on the enforcement of the Ancient Monuments and Archeological Areas Act, 1979.
 The Shetland Amenity Trust also maintain the SMR
- Historic Scotland control access to, through administering a licensing regime on behalf of Scottish Ministers, and manages a programme of periodic inspections and monitoring work in respect of Designated Wreck Sites (under the Protection of Wrecks Act 1973).
- Historic Scotland (Inspectorate) advises on proposals of change and administers the system of Scheduled

Monument Consent (SMC).

- Historic Scotland and/or Northern Constabulary enforces appropriate action in the event of damage to a Scheduled Monument.
- Northern Constabulary, HM Coastguard and Lerwick Port Authority in collaboration with Historic Scotland enforce the Protection of Wrecks Act 1973 in the event that unauthorised works / activities took place within a protected area.
- Ministry of Defence (MOD) enforces the Protection of Military Remains Act, 1986
- Receiver of Wreck enforces the Merchant Shipping Act, 1995 (Section 236). The Scots common law rights relating to found Archeological and historic items in Scotland (dealt with through the system of 'Treasure Trove') are also relevant in that they extend to the foreshore (see www.treasuretrovescotland.co.uk)

Background Reading:

- European Convention for the Protection of the Archeological Heritage (Revised, Valetta, 1992 Council of Europe).
- British Archaeologists and Developers Liaison Group (BALDG) Code of Practice.

2. BUSINESS & INDUSTRY

Aquaculture Planning Framework

The aquaculture industry in Shetland has two major components: finfish farms and those involved in the cultivation of shellfish (maps 3 and 4 of the Shetland Marine Atlas). The industry is a major component of the Shetland economy and salmon production is, by far, its largest element. In addition the farming of sea trout, cod and halibut has become well established. In respect of shellfish cultivation, mussels are the main species with a small number of sites being developed for scallops and oysters.

This section of this plan covers the legislative framework at coast and on seabed for development consent of aquaculture (hygiene / disease is not covered except in so much as the legislation requires zoning).

Planning Application Jurisdiction

Shetland Islands Council applies the Interim Policy for Marine Aquaculture (2007) to all planning applications for new or modified marine fish farming developments. It applies to the placement of equipment in the sea, on the seabed or on the foreshore below Mean High Water Spring (MHWS) out to 12 miles, under the scope of the Town and Country Planning (Scotland) Act 1997.

Currently, applications are considered in terms of the:

- a. Interim Policy for Marine Aquaculture (2007);
- b. Council's Structure and Local Plans (where relevant);
- c. National Planning Policy Guidance, Memoranda and Advice, set out in for example:
- d. NPPG 13 'Coastal Planning';
- e. NPPG 14 'Natural Heritage';
- f. SPP22 'Planning for Fish Farming';
- g. Circular SEDD 1/2007 'Planning Controls for Marine Fish Farming';
- h. Locational Guidelines for the Authorisation of Marine Fish Farms in Scottish Waters -Policy Guidance Note (Scottish Executive, 1999);

- i. Existing legislative framework currently applying to the proposed development;
- j. Wildlife and Countryside Act 1981;
- k. Water Environment and Water Services (Scotland) Act 2003; and
- l. Nature Conservation (Scotland) Act 2004.
- In addition, if applicable, applications are considered in terms of the
- m. Environmental Impact Assessment (Scotland) Regulations 1999 (the Regulations of 1999);
- n. Seabed lease from the Crown Estate;
- o. Water Environment (Controlled Activities) (Scotland)
 Regulations 2005 (as amended) (CAR) License from SEPA;
- p. Consent under the Food and Environment Protection Act 1985 from the Scottish Government;
- q. Consent under the Coast Protection Act 1949 from the Scottish Government.

N.B. Planning Permission does not control aspects of an operation that is specifically controlled by powers granted to these other regulatory bodies.

Planning Application Process

Permissions for fish farming are awarded after an informed judgement is made based on the best available evidence through the application, consultation and Environmental Impact Assessment (EIA) procedures.

On receipt of a Planning Application, Shetland Islands Council (SIC) forward the application for consultation to those listed in Appendix 4.

SIC considers the application in terms of the Interim Policy for Marine Aquaculture (2007), a full copy of which can be obtained from SIC. The policies have been extracted and included at the end of this document in Appendix 5. Potential developers should use the Interim Policy for Marine Aquaculture after they have considered the siting of the proposal using the Marine Spatial Plan policies detailed in this Plan and maps provided in the Shetland Marine Atlas (Part Two of this document).

Applications that are outwith policy, or attract objections will be determined by the Planning Board of SIC. As part of the decision making process both applicants and objectors are offered the opportunity of addressing the Board in the interests of open, fair and transparent governance. A final decision of the Council will continue to be required where an application outwith this policy is recommended for approval by the Board

In an attempt to clarify the legislative features and information that require consideration outlined previously, the following policy is specific local spatial guidance which should be supplemented with the Atlas provided in Part Two of this document.

Policy MSP AQ1: Aquaculture

Aquaculture development applications will be favourably considered where they have complied with:

- a. Policy MSP GD1 GD8;
- b. Locational Guidelines (for fin fish farming only); and
- d. local policy restrictions.

The Planning Authority may be minded to refuse any applications that fall outwith separation distances between other aquaculture developments (as detailed in the Interim Policy for Marine Aquaculture, 2007: 1000m for finfish; 500m for shellfish), and those distances detailed in policy MSP CBP2 and CBP3.

Developers should comply with the Interim Policy for Marine Aquaculture, 2007 (as detailed in Appendix 5), and included information regarding their conformity with the Fin Fish Code of Good Practice and ISACode of Practice.

All marine aquaculture proposals must demonstrate that anti-predator measures deter or prevent predation through use of methods which are non-lethal and do not cause any significant harm. For the avoidance of doubt the use of monofilament nets for such purposes is not permitted.

The Planning Authority will encourage applications where industry has sought to achieve agreement with all licensees and relevant stakeholders through either a Farm Management Agreement or Area Management Agreement.

Justification

The purpose of this policy is to clarify the conditions that restrict the placement of new aquaculture proposals which should improve guidance for developers, planners and regulators. For example, the policy highlights potential objections to an aquaculture development such as an obstruction, or something that will trigger EIA regulations and therefore the need to do further survey work.

Locational Guidelines areas are designated on the basis of FRS predictive models which assess the relative sensitivity of sea loch/ voe system to additional nutrient loading by fish farm development, taking account of data on the location and size of existing marine fish farms. As a result there will be areas outwith classification which are or could be sensitive to aquaculture development but have not been specifically highlighted as they do not contain aquaculture development at the moment.

Conflict resolution opportunities have worked successfully in the past in Shetland (such as Yell Sound Coast SAC Seal Plan) and will become more common as scope for growth becomes limited. It is advised that plans of this type seek assistance from the recently established Expert Working Group on Aquaculture Siting.

[Note: 'Designation of shellfish growing waters' and 'classification of shellfish harvesting areas' (shown in map 36) are not parts of the development application process. Classification is only sought once a site has been sanctioned and the operator is approaching first harvest. In Shetland, 'designated waters' status has largely been granted on the basis that an area already contains a number of existing shellfish farming sites rather than exploring 'virgin' territory on which to confer this status.]

This policy conforms to:

- SPP 22, NPPG 18, NPPG 5, NPPG 14
- SEPA policy 3
- Shetland Local Plan policy LP WD6 and LP WD9
- Structure Plan policies SP NE3 and GDS4.

This policy supports:

- Development Plan aim 3
- The Corporate Plan
- EU Water Framework Directive
- Water Environment and Water Services (Scotland) Act 2003 (WEWS)
- Water Environment (Controlled Activities) Regulations 2005.

Legislative Responsibilities:

- FRS on behalf of Scottish Government Marine Directorate (SGMD) for registration and licensing of fish farms
- Scottish Government, Marine Directorate (SGMD) for navigational consent and installation of fish farms under the Coast Protection Act.
- Scottish Environment Protection Agency (SEPA) discharge consents for chemicals, veterinary medicines
 and biomass consents by means of controlling effluent
 from fish farms by limiting the weight of fish on a farm.
- Shetland Islands Council
- · Lerwick Port Authority

Inspection, Enforcement and Control:

- Fisheries Research Services (FRS) Environment Protection Group
- Scottish Government Marine Directorate (SGMD)
- SEPA
- Shetland Islands Council
- Northern Lighthouse Board.

Background Reading:

- A Strategic Framework for Scottish Aquaculture. (2003).
 Scottish Government.
 http://www.scotland.gov.uk/Publications/2003/03/16842/
 - 20502
- Locational Guidelines for the Authorisation of Marine Fish Farms in Scottish Waters. (2008). Fisheries Research Services.
 - http://www.marlab.ac.uk/Delivery/Information_Resources/information_resources_view_document.aspx?contentid=1416
- Marine Aquaculture and the Landscape: The siting and design of marine aquaculture developments in the landscape. (2001). SNH.

Oil Extraction and Decommissioning

Policy MSP OIL1:

Oil Extraction Proposals and Decommissioning

Exploration for oil within 12-miles of the coast will only be permitted where they have:

- a. complied with Policy MSP GD1 GD8;
- b. included all elements such as connections to shore base and infrastructure; and
- c. included an appropriate monitoring programme and detailed restoration and maintenance proposals.

Further information may be required as part of the matrix of sensitivities detailed in Appendix 6 and/or contribution towards the EIA Regulations (1999).

Decommissioning and shore based activities are preferred in existing developed areas.

Justification

The oil industry has made a significant contribution to the economy of Shetland since the oil terminal at Sullom Voe was established and it is anticipated that Sullom Voe's role as a major oil landing facility will continue for the next 20-25 years. The precise timescale will depend on both the development of the Atlantic fields to a point where a pipeline landfall is initiated, but also on the location and success of new exploration and development areas.

Where an application for a Works License is sought for oil exploration the developer will be required to include a detailed monitoring programme because accidental spillage is damaging to wildlife and sites within 12 miles have little or no time for cleaning before oil reaches the shore.

It is important that early consideration is given to what occurs post-Sullom Voe: the situation is currently being monitored by Shetland Islands Council with a study commissioned recently to determine the future prospects of the port. Which will also have to give due consideration to the Sullom Voe SAC.

Regarding decommissioning, the community recognises the unique development opportunities associated with Sullom Voe for further marine related development given its attributes as a relatively sheltered, deep water anchorage. Any development would have to be compatible with aquaculture and fishing industry, together with providing a habitat for a

wide range of flora and fauna including some internationally protected and rare species.

This policy conforms to:

NPPG 13 and NPPG 4

This policy supports:

Legislative Responsibilities:

Inspection, Enforcement and Control:

Background Reading:

- OSPAR Offshore Oil and Gas Industry Strategy. Extract from the Annual Report of the OSPAR Commission 2006/07.
 - http://www.ospar.org/eng/doc/Annual%20Report%2020 06 7%20OIC.pdf
- IMO guidelines and standards for the removal of offshore installations and structures on the continental shelf and in the EEZ. (1989). http://www.imo.org/Environment/mainframe.asp?topic id=1026
- Scalloway Harbour Oil Spill Plan http://www.shetland.gov.uk/ports/contingencyplans/sca llowayoil.asp and the Sullom Voe Harbour Oil Spill Plan http://www.shetland.gov.uk/ports/contingencyplans/sull omvoeoil.asp



Renewable Energy

Policy MSP NRG1:

Exploratory, Appraisal or Prototype Renewable Energy Proposals

Exploratory, appraisal or prototype energy proposals will be encouraged where they have :

- a. complied with Policy MSP GD1 GD8;
- b. detailed any associated infrastructure required to service the site; and
- c. included an appropriate monitoring programme and detailed restoration proposals.

The granting of a Works License for exploratory, appraisal or prototype proposals will be for a specific time period and without prejudice to any subsequent application to develop fully operational projects at that location.

Justification

It is acknowledged that a significant level of exploratory work (including the building of prototypes) may be required to establish the optimum locations and the long-term viability of energy projects. It would be beneficial to engage with with both Scottish Natural Heritage and local industry at the early stages of the project design. Accordingly, temporary permissions or Licenses will normally be granted for exploratory proposals so that a proper assessment can be made of a particular site. This assessment of efficiency and appropriate monitoring to determine any impacts must be transparent and be demonstrated to the satisfaction of the Planning Authority. This will allow an informed decision to be made should the developer wish to apply for a more permanent site.

This policy conforms to:

- NPPG 4
- Shetland Local Plan policy NE12

This policy supports:

- The Corporate Plan
- Development Plan aims 1 and 3
- Coast Protection Act (CPA), 1949
- Part II of the Food and Environment Protection Act 1985 (Deposits in the Sea)

- Electricity Act, 1989.
- Forum for Renewable Energy and Development in Scotland (FREDS)

Legislative Responsibilities:

- Department of Trade and Industry (DTI) Licensing and Consents Unit (LCU)
- Fisheries Research Services (FRS) Environment
 Protection Group for FEPA License
- Scottish Government Marine Directorate (SGMD).
- Scottish Government Energy Consents Unit-Electricity ACT, 1989

Inspection, Enforcement and control:

- Health and Safety Executive (HSE)
- Maritime and Coastguard Agency (MCA)
- The DTI
- Controls on discharges
- Northern Lighthouse Board.

Policy MSP NRG2:

Renewable Energy Development Proposals

Renewable energy developments will be encouraged where they have:

- a. complied with Policy MSP GD1 GD8;
- b. included all elements such as connection to shore base and National Grid connections; and
- demonstrated to the satisfaction of the Planning Authority an appropriate monitoring programme specific to the design, scale and type; and,
- d. detailed restoration and maintenance proposals.

Further information may be required as part of the matrix of sensitivities detailed in Appendix 6 and/or contribution towards the EIA Regulations (1999).

Justification

Shetland's coastline and climate mean that the Islands have great potential for the generation of renewable energy. However, the offshore technology required to sustain the elements in the open seas around Shetland is still in its infancy, but this policy has been established in the eventuality that a proposal arrives within the term of this Plan.

It is still important that renewable energy sources and technology on a commercial scale are tried, tested and used for the benefit of consumers in Shetland. Despite all the obvious advantages of renewable energy, it is also important to ensure that the Shetland environment and the quality of life of its residents are not compromised. It would therefore be beneficial, at the early stages of the project design, for the developer to engage with Scottish Natural Heritage, local industry and the local community.

This policy conforms to:

- NPPG 5, 6, 13, 14, 18
- SPP 6 (for any onshore requirements of marine renewables)
- Structure Plan policies SP ENG 1, ENG 2, ENG 3
- Local Policy LP ENG 6, 7 and 8

This policy supports:

- Development Plan aim 1 and 3
- The Corporate Plan.

Legislative Responsibilities:

- Scottish Government Energy Consents Unit -Electricity Act, 1989
- Scottish Government Marine Directorate (SGMD) -Coast Protection Act (CPA), 1949
- Fisheries Research Services (FRS) Part II of the Food and Environment Protection Act 1985 (Deposits in the Sea)
- Northern Lighthouse Board.

Inspection, Enforcement and Control:

- Fisheries Research Services (FRS)
- The operator
- Northern Lighthouse Board.

Background Reading:

- Distribution of Development Human Activity and Environment Supplements
- Aggregates Working Paper

Commercial Fishing

Fishing opportunities within the 12 nautical mile limit around Shetland provide the opportunity for a wide range of commercial activity. These include the following whitefish and shellfish species (their spatial distribution is shown in maps 1 and 2 respectively):

- Cod (Gadus morhua)
- Haddock (Melanogrammus aeglefinus)
- Whiting (Merlangius merlangus)
- Monkfish (Lophius piscatorius)
- Veined squid (Loligo forbesi)
- Saithe (*Pollachius virens*)
- Lythe or Pollack (Gadus pollachius)
- Velvet crab (Necora puber)
- Edible brown crab (Cancer pagurus)
- Lobster (Homarus gammarus)
- Norway Lobster (Nephrops norvegicus)
- King scallop (Pecten maximus)
- Queen scallop (Aequipecten opercularis)
- Common whelk known locally as buckies (Buccinum undatum)

Finfish fisheries in the North Sea are managed through the EU Common Fisheries Policy (CFP). The CFP sets Total Allowable Catches (TAC) for most commercial species within European Waters and allocates quotas to Member States based on historic fishing rights. The CFP also includes a range of technical measures including fishing gear regulations and minimum landing sizes. The Scottish Government manages quota for fish stocks and controls the activities of fishing vessels and fishing effort (days spent at sea) out to 12 nautical miles.

Between 6-12 miles Member States' vessels have historic access rights as defined in the CFP Basic Fisheries Regulation (Regulation EU 2371/2002). The Netherlands and Denmark have historic rights access in the 6 - 12 mile zone around Shetland for herring.

Scottish fishing vessels have exclusive access to the fisheries and waters out to 6 miles. In the case of Shetland, however, within 6 miles shellfish fishing is managed by the Shetland Shellfish Management Organisation (SSMO) under a regulating

order, using a licensing system. The SSMO manages fishing methods and fishing gear, restricts fishing seasons, sets minimum sizes for shellfish and manages shellfish beds for stock conservation.

The SSMO is also responsible for the collection of data which allows a comprehensive Stock Assessment to be developed year on year. This allows fishery management to take place based on the best possible information and analysis.

The Scottish Fisheries Protection Agency (SFPA) coordinates an enforcement programme for the monitoring, control and surveillance of sea fishing activity. The SFPA also undertakes investigations and prosecutions when breaches of the regulations are identified.

Policy MSP FI: Safeguarding Fishing Opportunities

All relevant organisations and stakeholders will work with the local fishing community to safeguard the future sustainability of the industry and their stocks without adversely affecting marine ecosystems. Development proposals will not normally be permitted if it affects an important fishing ground*, a route between a fishing port and a harbour, or spawning and nursery area.

* An important fishing ground is defined by the frequency of use or productivity of an area, which has been determined by local fishermen.

Please note that the maps of local grounds in the Marine Atlas are currently incomplete and preapplication consultation is strongly advised.

Policy MSP F2:

Local Management of Sustainable Fisheries

Local fisheries management will develop appropriate measures so that fishing is not carried out in ways that damage important habitats and species (as detailed in the matrix of sensitivities).

Justification

In Shetland, there are strong economic and social arguments for conserving fishing grounds. Determining factors in the location of fishing activity are cost-effective distance between the ports of call and its relationship with fishing, and obstructions such as aquaculture and prevention of certain gear types (dredging) around oil and gas pipelines.

Many habitats, and consequently the target commercial species that live there, could be lost to insensitive development and can never be replaced once lost or take years to recover. In order to ensure that fishing is as productive as possible, this policy is designed to ensure the sensitive placement of other activities.

On the other hand, some fishing activity can have impacts on non-target habitats and species. The spatial information on these protected seabed species should be used to encourage the diversion of bottom trawling and dredging outwith these areas.

Local agreements should be encouraged to achieve the objectives of these policies, such as one previously established for management of the sandeel fishery between RSPB Scotland, the Shetland Fishermen's Association, SNH and the Scottish Government. Future agreements are likely to be achieved through the Shetland Shellfish Management Organisation and the proposed Inshore Fisheries Group.

This policy conforms to:

- NPPG 15 and 14
- Shetland Structure Plan Policy SP NE9, GDS1, GDS2
- Shetland Local Plan Policy LP NE10, NE 13
- Regional and Local Biodiversity Action Plans.

This policy supports:

- Development Plan aims 1, 2, 3 and 4
- The Corporate Plan
- Inshore Fishing (Scotland) Act 1984

- Sea Fish (Conservation) Act 1967
- Biodiversity: The UK Action Plan
- Safeguarding our Seas A strategy for the conservation and sustainable development of our marine environment.

Legislative Responsibilities:

- Scottish Government Marine Directorate
- Shetland Shellfish Management Organisation.

Inspection, Enforcement and Control:

- Scottish Government Marine Directorate (SGMD)
- Scottish Fisheries Protection Agency (SFPA).

Background Reading:

- Safeguarding our Seas A strategy for the conservation and sustainable development of our marine environment.
- A Strategic Framework for the Scottish Sea Fishing Industry (2006) Scottish Government http://www.scotland.gov.uk/Publications/2005/03/2086 0/File-1
- Prime Ministers Strategy Unit Fisheries project (2004)
 Net benefits A Sustainable and Profitable Future for UK fishing.
- Royal Society of Edinburgh (2004) Inquiry into the future of the Scottish Fishing Industry.



Mineral and Aggregate Extraction

Shetland Islands Council can permit extraction of sand, gravel and shingle and coastal quarrying under the ZCC Act through issuing a License in all areas except the Lerwick Harbour area (under the jurisdiction of the Lerwick Port Authority). An independent technical report from a competent body must be submitted to Shetland Islands Council at the applicant's expense. This technical report should assess whether the development would have knock on effects on the surrounding coastal environment, including information on the likely cumulative effects of this development. In particular, it should detail the hydrographic conditions and any information on the lateral and longitudinal shifts along the beach or coastline of the proposed area.

Policy MSP EX1: Extraction of Sand, Gravel and Shingle

Proposals for the extraction of sand, gravel or shingle from beaches and dunes and below the Mean High Water Spring (MHWS), including coastal quarrying, would not normally be permitted, but where it has to be considered, the relevant Planning Authority will ensure the application has:

- a. complied with Policy MSP GD1 GD8;
- b. provided a description of the alternatives that have been considered. This should include:
 - i. alternative sources (both within and outwith Shetland - bearing in mind the most sustainable option may actually being sourcing material from out with Shetland);
 - ii. alternative materials;
 - iii. using dredged material; and
 - iv. doing nothing;
- c. detailed how sand/gravel extraction is an essential part of the proposed project;
- d. provided details of the works (ancillary equipment, storage, access, use of vehicles etc);
- e. submitted an independent technical report from a coastal engineer with the planning application.

When deemed necessary the works should be carried out with a local archaeologist present.

Justification

The aim of this policy is to protect the coastline from damaging extraction. Sand, gravel or shingle extraction can have impacts well away from the extraction site if it interferes with the movement of sediment along the coastline -very small changes to beach composition can lead to knock on effects and flooding risk.

The quarrying of active beach material reduces the sedimentary store of the donor beach, which in turn reduces its capacity to respond to storm events. Research into sediment supply on open beaches suggest that a very minor fall in lateral sediment supply (e.g. 0.1% fall in sediment from adjacent sections of beach) would result in comparable rates of beach erosion as a 0.5m increase in mean sea level.

Given the sea level changes experienced since the last ice age, Shetland has experienced rising sea levels for the last 13 thousand years. This has a profound effect on the coastline and the location of sediment stores. Unlike much of mainland Scotland which has glacially derived sediments (known as fluvi-glacial sediments) held in river terraces and other features, Shetland's fluvi-glacial sediments are below sea level. This combined with the thousands of years of submergence mean that Shetland's coastline has rolled back on itself, leaving very little of the 'old' coastal zone, where these sediments would remain. This, unfortunate chain of events for Shetland, means that the sediment stores at the coast are limited, unlikely to be replaced and currently provides a 'natural coastal defence' role with a dwindling asset.

If the results of the technical report are inconclusive the precautionary principle will apply. If Archeological remains are present there may be circumstances where *in situ* remains could be excavated in advance at the discretion of the Shetland Archaeologist and at the developer's own expense.

This policy conforms to:

- Shetland Local Plan policy LP MIN9
- NPPG 4
- Structure Plan policy GDS1, GDS4, SP MIN2 and SP MIN3

This policy supports:

- Development Plan aim 1 and 3
- The Corporate Plan
- Coast Protection Act (CPA), 1949.

Legislative Responsibilities:

- Scottish Government Marine Directorate (SGMD) through Government View Procedure
- Fisheries Research Services (FRS) Environment Protection Group - administer the FEPA regulations on behalf of Scottish Ministers
- The (non-statutory) Government view procedure requires an EIA to be undertaken for all dredging operations
- Crown Estate issues License after favourable Government View.
- Ancient Monuments and Archaelogical Areas Act, 1979

Inspection, Enforcement and Control:

- Crown Estate acts as landowner and monitoring / enforcement agency for the monitoring of tonnage removal and compliance with license conditions
- Lerwick Port Authority or Shetland Islands Council, Port and Harbour Operations - control and enforcement within their specific areas of jurisdiction
- Shetland Islands Council Coast Protection Act
- CEFAS Provide monitoring and advice on fisheries impacts of extraction activities with real time monitoring and modelling sediment plume density and dispersion for impact assessment before, during and after extraction.

Background Reading:

• Aggregate Working in Shetland 1994.

Tourism and Recreation

As an island community, Shetland has always relied heavily on the sea; as a result it has been well looked after and the facilities available for recreational users and visiting boats are excellent.

Recreational opportunities around the coast of the Shetland Islands provide the opportunity for a wide range of recreational and commercial activities. These include:

- Windsurfing
- Surfing
- Diving
- Sea-kayaking
- Rowing
- Sailing
- Yacht events
- Fishing / Sea Angling
- · Natural history tourism and wildlife watching
- Coasteering
- Traditional Boats
- Power Boat water skiing and jet skiing
- Ferry Services, charter boats

Marinas and piers often form the heart of Shetland's districts: there are visitor berths at most of the 15 marinas, and the community enjoys 325 points of access to the shore in the form of jetties, piers and slipways. Yachting also takes prominence: there are 17 regattas held every year as well as the Round Foula Race, the Lerwick to Skerries Race and the international Bergen-Shetland Races.

Tourism is worth £13m to the Shetland economy each year but there is considerable scope for growth. The Shetland Tourism Association and Visit Shetland, effectively manage existing and new opportunities. They also play an important role in promoting investment that encourages the creation of tourist facilities around appropriate attractions and activities, both on- and offshore.

Developments associated with water sport uses such as slipways and marinas require a Works License. It is the general intention of Shetland Islands Council to conserve the character of the coast and to protect it and its surroundings from development which may be detrimental to this character.

Policy MSP TR1: Marine Recreation

Local communities, user groups and other relevant agencies will seek opportunities to increase provision for those wishing to participate in water sports and recreation provided that development does not have any adverse impact on natural heritage, landscape character and the sustainability of local industry i.e. fishing grounds. To this end, the Planning Authority will look favourably upon applications to provide new facilities, or to extend and enhance existing provision, providing they have:

- a. complied with Policy MSP GD1 GD8; and
- b. accommodated, where practicable, the multiple use of water areas.

Power craft use, such as Jet Skis, should be concentrated in areas where they will not cause any impacts to sensitive habitats and species.

Justification

The contribution a fully developed water sport industry can make to local tourism is recognised. National planning guidance requires Local Plans to identify and protect water sports areas and identify water resources with potential for development. The aim of this policy is to ensure that existing public access areas are protected. These areas provide a valuable recreational resource, helping to promote health and the enjoyment and awareness of the natural and historic environment.

Water related sport is an important leisure activity in Shetland and the seas surrounding the coast are important recreational resources, the potential of which remains to be fully developed. The potential contribution to Shetland's tourist economy is acknowledged, and the policy aims to support opportunities associated with water sports.

Development of watersports should not be to the detriment of the natural heritage of Shetland and other industries such as fishing. Care must be taken to avoid conflict between watersports and areas where there are important concentrations of protected species such as the harbour porpoise.

This policy conforms to:

- Local Plan policy CFS4 and COM14
- Structure Plan policy SP COM1, CSE2 and CST2
- NPPG 11 and 13.

This policy supports:

- Development Plan aims 2 and 4
- The Corporate Plan
- The Local Transport Strategy.

Legislative Responsibilities:

- Maritime and Coastguard Agency (MCA) Provision to approve byelaws confirmed by the Secretary of State for Transport, as laid down in section 236 of the Local Government Act 1972.
- Local Authorities provision to make byelaws to control unwanted activities (but implies policing responsibility to enforce)
- National Trust provision to make byelaws under the National Trust Act, 1907.



Policy MSP TR2:

Tourist Developments

New tourist developments will be favourably considered where they have:

- a. complied with Policy MSP GD1 GD8; and
- b. provided detail of the design, scale and type ensuring the retention or enhancement of the ecological characteristics, landscape character and popular coastal views

Developments that contribute to the following will be looked upon more favourably:

- c. appropriate management of attracting more people and spending to Shetland;
- d. help to lengthen the tourist season, develop the conference trade or encourage business tourism;
- e. benefit the local community as well as the tourists;
- f. enhance or make better use of existing attractions and facilities and promote the local character of an area:
- g. provide appropriate interpretation facilities;
- h. make better use of existing infrastructure, including the re-use of redundant buildings, ships, piers and other facilities; and,
- i. promote "environmentally responsible" tourism.

Justification

Shetland's economy is becoming increasingly reliant on its service sector, and tourism has the greatest potential for growth in that sector. The purpose of this policy is to increase the present level of tourism in Shetland, without damaging the resource on which it is based. Although tourism is one of the main sources of income in the economy it must be developed in a sustainable manner. Careful consideration on the design and siting of information facilities is necessary to enhance the area in which they are located.

This policy conforms to:

• Structure Plan policy SP TOUR1

This policy supports:

- Development Plan aim 1, 2 and 3
- The Corporate Plan

Legislative Responsibilities:

- Scottish Ministers devolved matter for seaward developments. Responsible for the issuing of Harbour Revision Orders dependent on EIA. Also consents under the Coast Protection Act 1949.
- Fisheries Research Services (FRS), Environment Protection
 Group administer FEPA regulations on behalf of Scottish
 Ministers
- Shetland Islands Council License required before development begins
- Crown Estate License required before development begins.

Policy MSP TR3:

Environmental Protection as a Priority in Marine Tourism

Local marine tour operators should comply with MSP Policy GD1 - GD8.

Local marine tour operators should abide by and advocate the use of 'The Scottish Marine Wildlife Watching Code', 'A Guide to Best Practice for Watching Marine Wildlife' and 'Guidance Notes for Divers and Archaeologists on the Protection of Wrecks Act 1973'. Recreational users should be made aware of these codes of conduct.

Justification

This policy seeks to ensure that, in meeting the demand for eco-tourism, no harm is caused to the unique and irreplaceable features that attract visitors to Shetland in the first place.

Existing statutory and other formal mechanisms have a critical role to play in planning and managing for genuinely sustainable marine tourism. However, it is important to recognise that these will often need to be supplemented by a range of informal and voluntary measures in order to achieve a balance between approaches. Supplementing the statutory approach

with voluntary regulations can address the shortcomings that formal regulatory structures tend to exhibit in respect of the unique problems inherent in planning for genuinely sustainable marine ecotourism.

This policy conforms to:

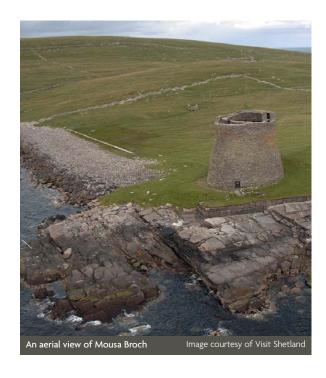
- Shetland Structure Plan policy SP NE8 and NE9
- Shetland Local Plan policy LP NE10, NE13
- NPPG 14
- Regional and Local Biodiversity Action Plans.

This policy supports:

- Development Plan aims 1 and 3
- Biodiversity: The UK Action Plan
- Safeguarding our Seas A strategy for the conservation and sustainable development of our marine environment.

Background Reading:

- Scottish Marine Wildlife Watching Code
- Guidance Notes for Divers and Archaeologists on the Protection of Wrecks Act 1973
- Shetland Sandy Beach Access Audit
- Shetland Interpretive Plan.



3. INFRASTRUCTURE & SERVICES

Infrastructure: Construction Permission Framework

Local Responsibility for Construction Permission

Under the Zetland County Council Act 1974 (the Act of 1974), Shetland Islands Council (SIC) has a duty to promote the conservancy and control of development (other than that for the purposes of marine fish farming) throughout Shetland, with the exception of those areas under the jurisdiction of Lerwick Port Authority or Broonies Taing Pier Trust (as shown in map 9 of the Shetland Marine Atlas).

The Council applies the Works License Policy to all applications for the placement of 'works' on the seabed or on the foreshore below Mean High Water Spring (MHWS) to the limit of the territorial sea (12 nautical miles).

The Works License policy is an integral component of this Plan, and as such, is summarised here.

Works License Jurisdiction

The Works License policy is primarily concerned with, but is not confined to, the following development activities:

 Piers, marinas, breakwaters, sea defences, pipelines and other constructions

Applications for Works Licenses are considered within the terms of the:

- a. Works Licence policy;
- b. Council's Structure and Local Plans (where relevant);
- c. National Planning Policy Guidance, Memoranda and Advice, set out in for example:
 - (i) NPPG 13 'Coastal Planning'; NPPG 14 'Natural Heritage'; and
 - (ii) SEPA policy and guidance. Of specific relevance is Policy 55 on Provision of Waste Water Drainage in Settlements (available from www.sepa.org.uk/policies/index.htm)

d. Existing legislative framework currently applied to the proposed development:

- (i) Birds Directive (79/409/EEC) that covers the conservation of wild birds and includes provision for designation of Special Protected Areas;
- (ii) Wildlife and Countryside Act 1981;
- (iii) Water Environment and Water Services (Scotland) Act 2003;
- (iv) Nature Conservation (Scotland) Act 2004;
- (v) Consent under the Coast Protection Act 1949 (from the Scottish Government); and
- (vi) Conservation of Natural Habitats of wild flora and fauna (92/42/EC0 (The Habitats Directive).
- (vii) The Conservation (Natural Habitats &c.)

Regulations 1994

In addition to (if applicable):

- (vii) Land-use planning policies for development above MLWS;
- (viii) Advice and consent from Shetland Islands Council as the Coast Protection Authority for coastal protection works;
- (ix) Seabed lease from the Crown Estate;
- (x) Water Environment (Controlled Activities) (Scotland) Regulations 2005 (as amended) (CAR) License from SEPA;
- (xi) Consent under the Food and Environment Protection Act 1985 (from the Scottish Government);

A Works License does not control aspects of an operation that is specifically controlled by powers granted to these other regulatory bodies.

Works License Application Process

The Works License policies have been extracted and included in Appendix 3. A full copy of the Works License Policy and an application for a License can be obtained from Shetland Islands Council. A Works License Application for a project within the area of jurisdiction of Lerwick Port Authority requires an application made to Lerwick Port Authority. Potential developers should use these Works License Policies after they have considered the siting of the proposal using the Marine Spatial Plan policies and maps provided in the Shetland Marine Atlas.

Applications that are outwith policy, or attract objections, will be determined by the Planning Board of Shetland Islands Council. As part of the decision making process, both applicants and objectors are offered the opportunity of addressing the Board in the interests of open, fair and transparent governance. A final decision of the Council will continue to be required where an application outwith this policy is recommended for approval by the Board.

Seabed lease from the Crown Estate

The Crown Estate, as owner of about half of the foreshore and almost all the seabed in Scotland, grants landowner consents for development by virtue of The Crown Estate Act 1961. Although Shetland Islands Council can issue Licenses for construction or permission for Aquaculture, there is usually a Crown Savings clause which means that the Planning Authority (SIC) still requires the Crown Estate's consent as landowner.

Direction of the Crown Estate by Government is a reserved matter although the Crown Estate complies with devolved policy and legislation as appropriate.

Consent under FEPA

Construction work which involves the deposition of materials below the High Water Mean Spring, e.g., building of harbours, jetties, sea outfall pipes, reclamation of land etc. is regulated under Part II of the Food and Environment Protection Act 1985 (FEPA). A FEPA License (for construction) is normally required and can be obtained from Fisheries Research Services in Aberdeen (on behalf of the Scottish Ministers).

Some minor works of construction may be exempt from FEPA licensing; these are listed in the Deposits in the Sea (Exemptions) Order (Scotland), 1995. However, an application should always be submitted to FRS for assessment of the need for licensing.

Development in or near an EU protected site

The Marine Atlas can be used to help a developer to determine whether they are in or near an EU protected site. Where a development is proposed in or near an EU protected site it is important that the developer laises with SNH at the earliest possible stage. An Approiate Assessment may be required if it is considered that there is a potential for significant effect.





Infrastructure: Shore Access

Shore access development is defined here as piers, jetties, slipways and marinas and their access tracks (shown in map 5).

Policy MSP SA1: Shore Access

Shore access developments will be considered favourably where they have:

- a. complied with Policy MSP GD1 GD8;
- b. detailed the level of impact of construction and increased access and traffic both on land and at sea; and
- c. clearly demonstrated the implications for existing users and planned future use.

Shore development proposals are encouraged where activity already exists.

Justification

The purpose of this policy is to protect the character of the coastal zone from inappropriate development and to direct development requiring a coastal location to areas with existing development, or sites where the character of the coastal zone could accommodate such development. Developers should be aware of the need for compliance with the Shetland Local Plan policies.

Globally it is likely that sea levels will rise significantly over the next hundred years and that storms will become more severe. Around Shetland a sea level rise of 0.8 to 0.9 metres (3 feet) is predicted. This will have consequences for all existing and proposed jetties, piers and marinas. Great care will be taken to ensure development proposals will not increase the likelihood of erosion or tidal inundation.

These policies conform to:

- Local Plan policy LP CST6 and LP NE10
- NPPG 13
- Structure Plan policy GDS1, GDS4, SP CST1.

These policies support:

- Development Plan aims 1, 2 and 3
- The Corporate Plan.

Legislative Responsibilities (above low water):

 Shetland Islands Council, Planning on behalf of Scottish Government Development Department (SGDD)

Legislative Responsibilities (below low water):

- Scottish Ministers devolved matter for seaward developments. Responsible for the issuing of Harbour Revision Orders dependent on EIA. Also consents under the Coast Protection Act 1949.
- Fisheries Research Services (FRS), Environment Protection
 Group administer FEPA regulations on behalf of Scottish
 Ministers
- Shetland Islands Council License required before development begins
- Crown Estate License required before development begins.

Inspection, Enforcement and Control (above low water):

 Shetland Islands Council - controls the applications system, enforcing development controls, and ensuring environmental assessment of developments under the Environmental Impact Assessment (Scotland) Regulations 1999.

Inspection, Enforcement and Control (below low water):

- Fisheries Research Services Environment Protection Group
 administer FEPA regulations on behalf of Scottish
 Ministers
- Shetland Islands Council
- Operators report on likely impact and monitoring duties.

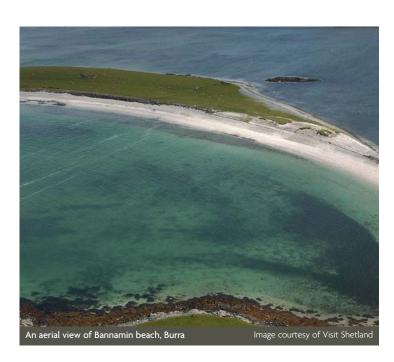
Infrastructure: Coastal Defence and Flood Protection

Primary responsibility to protect land lies with the landowner who may undertake flood prevention works, subject to necessary planning permission, or coast protection works, subject again to planning permission and the approval of the Coast Protection Authority (which is Shetland Islands Council, Port and Harbours Operations, and the Coastal Engineer, who is based within the Planning Service). Requirements of any coastal works should be carried out in line with Scottish Planning Policy 7 'Planning and Flooding'.

The Coast Protection Act 1949 and the Flood Prevention (Scotland) Act 1961 (as amended by the Flood Prevention and Land Drainage (Scotland) Act 1997) allow local authorities (identified as Coast Protection Authorities in the 1949 Act) to promote appropriate schemes, on land not in their ownership, when the need for coast protection works or flood prevention works (for non-agricultural land) is deemed necessary in the wider public interest. Such schemes require ministerial approval regardless of size. Coast Protection Authorities are permitted to undertake maintenance and emergency work under the terms of the 1949 Act.

The UK Climate Impacts Programme (UKCIP)* provides scenarios that show how our climate might change and co-ordinates research on dealing with our future climate. The implications of climate change for coastal hazards on Shetland are documented in 'Climate Change and Coastal Hazards on Shetland', available from SIC or to download from:

www.shetland.gov.uk/developmentplans/documents/v2all.pdf



Policy MSP CD1: Coastal Defence Construction

The installation of flood defences and coastal protection works will only be permitted if coastal erosion or flooding threatens public infrastructure and important built development where there is a significant safety risk. Where this has been demonstrated, the construction of flooding or coastal defence developments will then be considered favourably where they have:

- a. complied with Policy MSP GD1 GD8;
- b. provided detail of relocation options;
- c. detailed the design, ensuring the retention or enhancement of the ecological characteristics, landscape character and popular coastal views;
- d. can demonstrate the wider implications of exacerbating flooding or coastal erosion processes elsewhere.

Where coastal defence is deemed necessary, there should be an overall presumption in favour of soft rather than hard defences.

The use of managed realignment of coastal defences where appropriate will be promoted.

Policy MSP CD2: Coastal Defence Demolition

Permission for the demolition of coastal defence materials will only be permitted when it can be demonstrated that there are no adverse impacts for the environment, landscape or land use.

In particular, when considering the demolition of coastal defence structures, the following should be taken account of:

- a. historic value of the structure in its surroundings;
- b. potential to re-use the material;
- c. implications for reinstatement; and
- d. value to species and habitats, such as providing a substrate for an important rocky shore habitat, or shelter for otters.

Justification

The coast of Shetland is subject to constant attack by the sea. As a result of cliff and beach erosion the shoreline is naturally receding, indeed there would be no beaches if erosion were not to occur. Development near the coast is preventing erosion from occurring and therefore creates a need for defence.

Many of the defences against erosion or flooding have traditionally been 'hard engineering' works. Hard coastal defence works includes dykes and groynes, rock armour, seawalls, gabions. However these are initially expensive and utilise large quantities of raw materials for concrete etc.

Soft coastal defence works include beach nourishment and beach re-enforcement by means of nets, recharging, Marram grass, etc. Unofficial attempts at 'soft' defences, such as beach re-enforcement by means of nets over dunes, are quite common in Shetland, used to prevent sand encroaching onto land.

There is no requirement to prepare formal plans or strategies for coastal defence work. However, National Planning Policy Guideline 13 (Coastal Planning) encourages local authorities to prepare non-statutory Shoreline Management Plans where it is recognised that coastal erosion is a problem.

Work on the preparation of such plans has not been started yet by Shetland Islands Council (SIC), despite it being started by some other UK Councils. The SIC does however have a new post in place to specifically look at flood prevention infrastructure. Furthermore, a Shetland Flood Liaison Appraisal Group has been recently set up who plan to review the council's coast protection and flooding policy. Flood and coast protection policies in Shoreline Management Plans and Local Development Plans will be supported where they account for wider marine interests.

This policy conforms to:

- Shetland Local Plan policy LP WD10
- Structure Plan policy GDS1
- NPPG 13
- Scottish Planning Policy 7.

This policy supports:

- Development Plan aim 3
- The Corporate Plan.

Legislative Responsibilities:

- Scottish Government Marine Directorate (SGMD)
- Fisheries Research Services (FRS), Environment Protection
 Group administer FEPA regulations on behalf of Scottish
 Ministers.

Inspection, Enforcement and Control:

- SEPA In the result of a pollution incident, would enforce The Water Environment (Controlled Activities) (Scotland) Regulations 2005 (as amended) (CAR)
- Fisheries Research Services (FRS)
- Shetland Islands Council Transport & Works Act, 1992
- Land owner.

Background Reading:

More details on the legislative regime for consents and consultations can be found in "A Guide to managing coastal erosion in beach / dune systems" published by Scottish Natural Heritage, Battleby, October 2000, and available to read online at: http://www.snh.org.uk/publications/online/heritagemanagement/erosion/sitemap.shtml

^{*} UKCIP is part of a wider programme of research into climate change being undertaken by the Department for Environment, Food & Rural Affairs (Defra).

Infrastructure: Cables and Pipelines

A number of oil and gas pipelines and telecommunication and power submarine cables exist within the plan area (map 12) which form a vital part of the Islands' socioeconomic infrastructure. Power and telecommunication cables provide lifeline services to communities in most of the islands around Shetland. Similarly, oil and gas extraction has been a significant contribution to the Shetland economy, and this will continue for at least another 30 years.

The consenting of submarine cables is governed by the Scottish Government. Local Licenses are also required from Shetland Islands Council from the MHWS out to the 12 nautical mile limit.

Policy MSP CBP1:

Placement of New Telecommunication and Submarine Cables and Oil and Gas Pipelines

There are a variety of methods and innovative ways for a developer to engineer their route in the placement of cables and pipelines. In all cases the best environmental option, not withstanding safety considerations, will be favoured. Where possible, cables and pipelines should use existing routes and landing points. New cables and pipelines should have landing points in existing developed areas.

The laying of communication cables and oil and gas pipelines will be considered favourably where they have:

- a. complied with Policy MSP GD1 GD8;
- taken account of the implications for landing points including any seasonal sensitivities, and impacts to existing land use.

Justification

The purpose of this policy is to ensure developers explore the range of options open to them in laying cables and pipelines to make it suitable to the environment in which they propose.

This policy conforms to:

- Shetland Local Plan Policy LP NE10
- Structure Plan policy GDS1, GDS4, SP IND1, SP ENG1.

This policy supports:

- Shetland Local Plan policy LP CST4
- Development Plan aim 1 and 3
- The Corporate Plan
- Submarine Cables Act 1885
- UNCLOS (United Nations Convention on the Law of the Sea) 1982
- Telecommunications Act 1984
- Electricity Act, 1989
- Communications Act 2003.

Legislative Responsibilities:

- Scottish Government Consents for Coast Protection Act, 1949
- FRS, Environment Protection Group administer FEPA licenses under the Food & Environment Protection Act 1985.

Inspection, Enforcement and Control:

- FRS on behalf of Scottish Ministers this covers the assessment and issue of licenses, enforcement visits and routine monitoring.
- Operators report on likely impact and monitoring duties.

Policy MSP CBP2:

Avoidance of Cables and Pipelines

Activities that could damage any cables and pipelines (e.g. dredging or mooring attachments to the seabed) should be avoided:

- a. oil and gas industry recommend an exclusion zone of 500m around pipelines, well heads and platforms; and
- b. telecommunication and electricity companies recommend 250m on either side of submarine cables.

Justification

Dredging for fish in Shetland has previously caused damage to communication and electricity cables. These cables provide lifeline services to Shetland and damage can jeopardise this, as well as creating a need for extra resources for repair. The aim of this policy is to establish clear safety zones that address potentially serious public safety issues.

This policy conforms to:

- Petroleum Act 1987 (Section 21)
- Submarine Cables (Safety) Regulations 2004.

This policy supports:

- Development Plan aim 3
- The Corporate Plan
- Water Environment (Controlled Activities) (Scotland)
 Regulations 2005 (as amended) often referred to as CAR.

Policy MSP CBP3:

Placement of New Wastewater Pipelines

There will be a general presumption against the laying of new wastewater pipelines.

The development of new wastewater pipelines from the land entering the sea will only be permitted where:

- a. a public wastewater system is not already present;
- b. a suitable soakaway is unachievable; and
- c. it has complied with Policy MSP GD1 GD8.

In situations where a new pipeline is acceptable, the proposal will then be favourably considered where they have demonstrated that:

- d. the seaward end of the pipe is sited well below the MLWS (check with SEPA) and at least 100m from any wrecks, Archeological remains and aquaculture sites; and
- e. it can fulfil any other requirements specified by SEPA and Shetland Islands Council's Building Standards.

Justification

Current SIC policy on the placement of wastewater pipes stipulate that it extends to below the tide level at Mean Low Water Spring (MLWS) and complies with dilution requirements. As part of the authorisation process, SEPA assesses the dilution requirement for effective effluent dispersal. However no specific buffer zone is placed around sensitive receptors such as aquaculture sites.

The aim of this policy is to ensure that wastewater arrangements, where permitted, are properly sited and have no public health or pollution impacts on the surrounding area, and in areas served by wastewater schemes, new developments are connected to the existing system.

This policy conforms to:

- NPPG 18, NPPG 5, NPPG 14
- SEPA policy 3
- Shetland Local Plan policy LP WD6 9.

This policy supports:

- Development Plan aim 3
- The Corporate Plan
- Water Environment (Controlled Activities) (Scotland)
 Regulations 2005 (as amended) often referred to as CAR.

Legislative Responsibilities:

 Scottish Environment Protection Agency (SEPA) on behalf of Scottish Government Marine Directorate (SGMD) for the authorisation to discharge by the Water Environment (Controlled Activities) (Scotland) Regulations 2005 (as amended) (CAR); Part II of the Control of Pollution Act; and the Coast Protection Act (CPA), 1949.

Inspection, Enforcement and Control:

Scottish Environment Protection Agency (SEPA).

Infrastructure: Moorings for Individual Boats, Weather and Radar Masts, Buoys and Anchorage

Moorings are structures attached to the seabed which can hold: individual boats, weather and radar masts, buoys and anchorage, marinas, barges, pontoons, renewable energy generators and shellfish growing equipment.

Lerwick Port Authority (LPA) or Shetland Islands Council (SIC) receives Works License applications for the following uses and spatial policies for these are detailed in their respective section ('aquaculture', 'shore access', or 'renewable energy'):

- Marinas;
- Renewable energy generators;
- Barges and pontoons; and
- Shellfish growing equipment.

The LPA or SIC then forward the application to the Crown Estate for a seabed lease. Seabed leases for individual boats, weather and radar masts, buoys and anchorage are not issued.

The sea around Shetland features a network of small structures which act as buoys and weather towers, shown in map 31 of the Shetland Marine Atlas. Buoys indicate the location of certain shipping routes, and therefore have less capacity for negotiation in terms of where they can occur.

There are very few single mooring agreements in Shetland, most boats are kept in small community marinas for which the Crown Estate charge £2 per berth per year.

Policy MSP MO1: Moorings

The mooring of individual boats is encouraged at designated marinas.

Proposals for additional mooring structures will only be permitted where:

- a. they comply with Policy MSP GD1 GD8;
- b. the need has been demonstrated;
- c. no other practical alternatives exist; and
- d. other users have been taken account of.
- e. the appropriate regulatory body has been consulted i.e. mooring within a Natura site requires contact with SNH.

Justification

Sporadically placed moorings naturally hinders a number of other users in their performance of their functions. This, combined with the cumulative impact of numerous mooring chains which can do substantial damage over a wide area, is the reason that boats are encouraged at designated marinas which are designed and sited to integrate with the landscape and compliment the character and scale of the surrounding area.

This policy conforms to:

NPPG 11, NPPG 13.

This policy supports:

- Development Plan aim 1 and 2
- Coast Protection Act (CPA), 1949
- The Crown Estate Act, 1961.

Legislative Responsibilities:

• The Crown Estate.

Inspection, Enforcement and Control:

• The Crown Estate.

Transport

Shipping (>5000 tonnes) is regulated by international agreements and are generally inflexible in terms of where they can go. The types of vessels in this category that Shetland receives are: cruise liners, large shipping and ferry vessels, cargo, oil related vessels such as diving support ships, platform supply vessels and oil tankers. The main routes have been mapped and are shown in map 10 of the Shetland Marine Atlas (Part Two of this document).

In some areas of Shetland, shipping not regulated by international agreements have more potential to be flexible with respect to other uses. The types of vessels Shetland receive in this category are: small fishing vessels, small ferries, aquaculture work boats, yachts and hobby boats. Only small ferry routes in this category have been mapped, shown in map 10 of the Shetland Marine Atlas (Part Two of this document).

In many voes of Shetland however, there are narrow channels where there is not a lot of room for manoeuvre, and so other activities that potentially conflict with shipping have to take shipping into account as a dominant use for safety reasons. Therefore, in the case of conflicts, other uses are secondary, but pre-application consultation for a development proposal with Lerwick Port Authority or Shetland Islands Councils Port and Harbour Operations is strongly advised.

Policy MSP TRANS1:

Safeguarding Navigation Channels and Port Areas

Development proposals that prejudice inshore navigation channels to ports or the long-term operational capacity of a ferry operation will be refused. Other developments within port and harbour authority areas should take account of the potential future marine development needs of ports.

Justification

All ferry terminals and port areas require a certain amount of operational area for approaching and leaving a pier in addition to its route to its destination (shown in Map 9). The aim of this policy is to protect the operational area from potential obstructions in order to maintain links to rural communities.

Development on the seabed (e.g. dredging or laying of cables and pipelines) should not be affected because they should not conflict with the operation of shipping except at the time of construction.

Navigation channels are not a given size, but more related to its distance between two land masses. For this reason, it is difficult to put a standard safety zone around shipping routes without wasting an area for another use that could safely occur.

Policy MSP TRANS2: Areas to be Avoided and MEHRAs

Large shipping vessels and other sea users must avoid additional areas around the Shetland coastline which have not been defined in the Shetland Marine Atlas, but should be clearly marked on Admiralty Charts. These additional features include:

- a. obstructions e.g. rocks and reef
- b. restricted area, explosives dumping ground, chemicals dumping ground, contaminated area;
- c. currents: dangerous tidal streams, overfalls, tide rips, races and eddies; and
- d. Marine Environmental High Risk Areas (MEHRAs)

Justification

Shipping is under significant pressure to minimise the impact of accidents and operations on the marine environment. Oil spills, collisions and groundings as well as waste discharges, anti-fouling systems, anchor damage, wake impacts and ship-generated noise have become increasingly important and high profile issues.

Since the Braer ran aground off Shetland over 15 years ago, the need for further protective measures to eliminate and reduce shipping related impacts around the UK coast, has been highlighted.

Ship owners and operators can take action through ensuring the integrity, maintenance and effective environmental management of their vessels and, secondly, through due consideration of the environmental requirements of any regions in which their ships will operate. In order to achieve the latter, Marine Environmental High Risk Areas (MEHRAs) have been proposed. Routeing measures aim to encourage ships to follow routes where vessels are less likely to collide with each other, run ashore or get into difficulties. They also aim to reduce the scope for a disaster if a ship does get into difficulty and direct ships away from areas where pollution would be highly damaging.

This policy conforms to:

- Shetland Local Plan policy LP TP9
- NPPG 17
- Structure Plan policy SP TP3
- The Local Transport Strategy.

This policy supports:

- Development Plan aim 1
- The Corporate Plan
- The Local Transport Strategy
- Harbours Act, 1964
- Lerwick Harbour Act, 1994
- Pilotage Act 1987.

Legislative Responsibilities:

 International Maritime Organisation (IMO) - Empowered to deal with administrative and legal matters relating to technical matters of all kinds affecting shipping engaged in international trade; standards for maritime safety; efficiency of navigation and prevention and control of marine pollution from ships.

- Department for Transport (DfT) Reserved matter for Merchant Shipping legislation within the UK.
- Maritime and Coastguard Agency (MCA) Responsible for maritime safety and the prevention of pollution.
- Scottish Government dredging for navigation and safety of navigation.

Inspection, Enforcement and Control:

- Scottish Government Marine Directorate (SGMD) maintenance dredging in coastal waters.
- MCA -powers to prosecute for a pollution incident from shipping (out to 200 miles).
- Lerwick Port Authority and Shetland Islands Council's Port and Harbour Operations - operate under a variety of legislation and could have the responsibilities to direct vessels to ensure safety of navigation; pollution prevention and clean-up.
- Northern Lighthouse Board -Buoy laying, consent and superintendence of lights, wreck marking outside harbour authority areas, lighthouse operations. Inspects navigation aids provided under the Coast Protection Act. Have responsibility under Merchant Shipping Act 1995 to deal with wrecks that are a danger to navigation outside Harbour areas.



Policy MSP TRANS3: Future Fixed Links / Ferry Terminals

The construction of fixed link developments and new ferry terminals will be considered favourably where they have:

- a. complied with Policy MSP GD1 GD8;
- b. detailed the level of impact from increased access, exclusion from areas and disturbance issues such as blocking sounds, construction noise and traffic both at the shore side and coast.

Justification

Consideration is currently being given to the replacement of one or more of the ferry services with fixed links. The Shetland Islands Council inter island ferry service will continue to be seen as the main lifeline link to the isles.

Routes have been mapped by the project (map 10); however, it is most likely that any future fixed links will be located close to the shortest crossing points. The aim of this policy is to make developers and users of the marine and coast aware of the possibility of fixed link developments.

This policy conforms to:

- Shetland Local Plan Policy LP TP10
- NPPG 17 and SPP 17
- Structure Plan policy SP TP3.

This policy supports:

- Development Plan aims 1, 2 and 3
- The Corporate Plan
- The Local Transport Strategy.

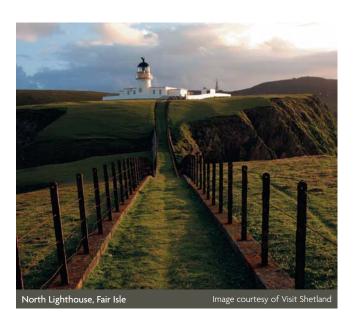
Legislative Responsibilities:

- Shetland Islands Council enforces the Transport & Works Act, 1992 and the Coast Protection Act (CPA), 1949.
- Lerwick Port Authority

Inspection, Enforcement and Control:

Background Reading:

- Lerwick Port Authority Port Marine Safety Code Policy Statement http://www.lerwickharbour.co.uk/information.html and Shetland Islands Council's Sullom Voe Harbour Authority's Safety Management System http://www.shetland.gov.uk/ports/contingencyplans/SV-SafetyManagementSystem.asp
- Marine Environment High Risk Areas (MEHRAs)
 http://www.dft.gov.uk/pgr/shippingports/shipping/elc/se cmehras/pdfmehras



Dredging and Disposal

License Application Process

Currently only the dumping of dredge spoil in the sea is licensed under Part II of the Food and Environment Protection Act 1985 (FEPA). Dredging activity (other than aggregates dredging) itself is not licensed although capital dredging is subject to Environmental Impact Assessment.

Shetland Islands Council can permit dredging under the ZCC Act through issuing a dredging License in all areas except the Lerwick Harbour area (under the jurisdiction of the Lerwick Port Authority).

The disposal of material arising from dredging requires a FEPA License from Fisheries Research Services in Aberdeen (on behalf of the Scottish Ministers). FRS has the power to impose conditions and limitations on the areas where dredging is permitted.

Some sea disposal operations are licensed annually, usually the major ports require an annual maintenance dredge, others undertake dredging operations when required and these can be either to maintain channels or berths or are associated with construction works to upgrade or replace existing port facilities.

A distinction is made between capital and maintenance dredging. The initial dredging of a channel is usually referred to as "capital dredging". This should be in an area or down to a level (relative to Ordnance Datum) not previously dredged during the preceding 10 years. It is often permitted under the terms of the harbour legislation (the ZCC Act).

Subsequent dredging to keep the channel at its desired depth is usually termed "maintenance dredging". Maintenance dredged material is derived from an area where the level of the seabed to be achieved by the proposed dredging is not lower (relative to Ordnance Datum), than it has been at any time during the preceding 10 years, or from an area for which there is evidence that dredging has previously been undertaken to that level (or lower) during that period. Provision is normally included in the harbour legislation or in a Revision Order if one is sought.

Policy MSP DD1:

Dredging and Disposal of Dredged Material

Proposals for dredging and the disposal of the dredged material will be considered favourably where they have:

- a. complied with Policy MSP GD1 GD8;
- b. detailed the level of impact from suspension of materials and disturbance to the seabed.

The permission of dredging and disposal of clean dredged materials (especially sands and gravels) will be favoured where a beneficial use for the disposal has been identified, such as beach nourishment.

Justification

Navigation channels require dredging. Most of the voes in Shetland used by large vessels are deep and therefore have never required dredging. However, dredging has occurred in the shallow exposed harbours of Lerwick and Scalloway (shown in Map 8).

The licensing authority works with License applicants, Shetland Islands Council, SEPA, SNH and others to identify potential uses for the dredged material. However, usually the dredged material is dumped (shown in map 8). This is because current licensing arrangements make re-use of demolished material an unlikely option for a developer. It is anticipated these regulations will be amended through a Marine Bill which makes this a more attractive option.

This policy conforms to:

- Shetland Local Plan policy LP MIN9
- Structure Plan policy GDS1, GDS4, MIN2 and MIN3
- NPPG 13 and 4.

This policy supports:

- Development Plan aim 1 and 3
- The Corporate Plan.

Legislative Responsibilities:

- Scottish Government Marine Directorate (SGMD) through Government View Procedure
- Shetland Islands Council and Lerwick Port Authority issue licenses for dredging
- Fisheries Research Services (FRS) Environment Protection Group - administer the FEPA regulations (Part II of the Food and Environment Protection Act 1985 (Deposits in the Sea)) on behalf of Scottish Ministers
- The (non-statutory) Government view procedure requires an EIA to be undertaken for all dredging operations
- Crown Estate issues License after favourable Government View.

Inspection, Enforcement and Control:

- Crown Estate acts as landowner and monitoring / enforcement agency for the monitoring of tonnage removal and compliance with License conditions.
- Lerwick Port Authority, Shetland Islands Council, Port and Harbour Operations - control and enforcement within their specific areas of jurisdiction
- Shetland Islands Council Coast Protection Act, 1949.
- CEFAS Provide monitoring and advice on fisheries impacts of extraction activities with real time monitoring and modelling sediment plume density and dispersion for impact assessment before, during and after extraction.

Background Reading:

 Environment Protection Group, FRS http://www.marlab.ac.uk/FRS.Web/Uploads/Documents/ FEPA%20Guidance.pdf





ACTION PLAN

Objectives

The objectives of the Action Plan are to:

- 5 Integrate the Marine Spatial Plan with other planning and regulatory systems;
- 6. Improved knowledge of the marine and coastal environment and take account of this;
- 7. Assess the sensitivities of marine wildlife and habitats to current and future uses; and
- 8. To restore damaged marine habitats and ecosystems.

The wider objectives of Marine Spatial Planning have guided the development of the following actions proposed to be conducted by the SSMEI pilot or by any competent authority.

MINIMISING CONFLICT

Conflicts at sea often arise between different users that claim areas as their own. Known conflicts exist between aquaculture and fishing activities in Shetland, mainly because aquaculture is considered a threat to fishermen because it reduces the total available area for fishing. In addition, most activities have an impact on the environment, creating conflict with the safeguarding of protected species and habitats. Fortunately for some other users, multiple use of space is possible around Shetland. Fisheries for example may benefit from ship wrecks, marine protected areas, offshore wind farms or other areas where fishing is not possible. These areas may function as attractive refuges and resting-places for smaller fish (nursery habitats), which would serve as an attractive food supply to bigger fish nearby.

Multiple use of space is also possible for maintenance dredging to allow bigger ships to enter Shetland's ports: the Lerwick Port Authority have plans to re-use dredged material for land reclamation for their harbour area.

Action 1:

Minimising Conflict with Future Development

Developers and their environmental contractors, regulators, planners and other stakeholders will be encouraged to use the policies and the maps to ensure everybody's needs are considered, thereby streamlining the development consents process.

Justification

The aim of this action is to encourage the use of the spatial information to ensure well-informed development applications and well-balanced decisions are made during the development application process.

Action 2:

A Pre-Application Consultation Database

A database of contact details will be integrated into the electronic maps to assist with community engagement in development plan preparation and shared with developers for pre-application consultations (subject to the requirements of the Data Protection Act). This database will include a sub-group that to which potential offshore development proposals might be directed.

Justification

A contact database comprising local people and groups who have helped map different use (fishermen and boating clubs) has been established by the SSMEI pilot (summarised in Appendix 2 and 4). This information should be integrated into the spatial information to improve communication.

This can be used to assist with community engagement in development plan preparation and shared with developers for pre-application consultations. [This has not been provided so far to conserve the confidentiality of the person who provided the information.]

Action 3:

Defining the Aspirations of Communities

Every community in Shetland will be asked to define their aspirations for their locality. These will be then taken account of in Sub-Area Marine Spatial Plans.

Justification

Community Planning is a process which helps public agencies to work together with the community to plan and deliver better services which make a real difference to people's lives. It is a powerful tool in helping local communities voice their aspirations. The principal role of this action is to prepare and implement a strategy for specific marine locations. The strategy should set out how the Marine Spatial Plan and its partners will work together to improve the quality of life for local people.

USING AND IMPROVING OUR KNOWI FDGE

Action 4:

An Integrated Plan for Marine Monitoring

A local monitoring strategy will be developed that effectively manages existing and new data sources. This will co-ordinate science and industry involvement with a view to providing more coherent data capture and storage. Associated with this strategy will be good practice in data archiving and access, interoperability of data between systems, the use of data in mapping, and availability of metadata.

Justification

Various organisations such as, SNH, SEPA and FRS undertake regular surveys of the marine environment, and many users such as fishermen, tourism providers, and ferry operators observe the marine environment on a day-to-day basis. It seems logical then that an integrated plan for marine monitoring should be established.

An integrated monitoring plan would require continual maintenance and therefore has resource implications beyond the capacity of the SSMEI pilot. Where possible, maps will be updated with current information.

Action 5:

Setting Data Standards

Publicly funded organisations should be directed and commercial operators should be encouraged to:

- a. make their data publicly available through the Shetland Biological Records Centre;
- b. provide data in a re-writable format (i.e. not PDF);
- c. Geo-reference information (give latitudinal and longitudinal values or if OS grid reference, this should be low scale, i.e. 'HU 4745 4529' is preferable to 'HU 44';
- d. adopt sound data management procedures and protocols such as providing metadata (the 'who', 'what' and 'where' of the survey); and
- e. collect sufficient benthic and physicochemical data to enable the classification of habitat type by another organisation.

Justification

It is acknowledged that the data supporting this Plan will have to be continuously updated. The information that was provided was often portrayed in very different ways, covered different time periods and different geographic areas, or was in different data formats (SSMEI Shetland, 2007).

The aim of this action is to promote further use of marine data and the ethos of "collect once, use often". This would reduce unnecessary survey effort and increase the return of survey effort.

Action 6:

Using the Broadscale Seabed Habitat Map

Any company or organisation conducting a seabed survey should be encouraged to use the predicted biotope map (provided on the CD in Part Two: A Shetland Marine Atlas) so that they can target the extent of their survey more efficiently. The differences between 'actual' and 'predicted' should be reported to increase our knowledge of seabed habitat distribution.

NB. The broadscale habitat map does not replace licensing and Environmental Impact Assessment requirements.

Justification

GIS was used to predict the extent of different habitats, using baseline data on sediment type, depth, topography, exposure and data from previous surveys. This type of predictive mapping was undertaken and performed by Envision Mapping Ltd.

Map A of the Shetland Marine Atlas shows the broadscale extent of seabed habitats (or biotopes) according to the MNCR classification system, a recognised national criterion of grouping seabed habitat types.

Whilst it has been scrutinised with local knowledge and compared with offshore surveys (giving a confidence level of 80%), users should use it with the caveat that it is a prediction, and might not accurately represent the true seabed habitat. Nevertheless, in the absence of comprehensive sample data, this modelling gives the best estimate of biotope distribution within Shetland's physiographic features. A translation of these biotopes into a map showing potential conservation interest may give the best indication of areas requiring special management through protection against potentially harmful impacts.

The SSMEI pilot is currently updating this map with data collated from fish farms. This, and the continual updating of the map will increase confidence levels.

Action 7:

Creating Industry-Science Partnerships

A voluntary engagement between marine planners and industry such as fishermen, boat tour operators or local or visiting divers should be established and maintained to assist with collection of site information.

Justification

Users of the marine environment hold a wealth of knowledge about the environment they work or play in, and as such, should be encouraged to feed this information to the management of the area.

The main aim is to map out the various important resources found around Shetland. This could involve recording what lives in each area, establishing the richest sites for marine life, the sites where there are problems and the sites which need protection.

Fishermen have been, and will continue to be, involved in mapping their knowledge on fishing grounds. These maps can be used by developers to avoid any objections from the fishing industry and thereby reducing any conflict that could occur.

A number of other initiatives between industry and research already exist, such as Seasearch for divers and the Biological Records Centre collates data from public sighting, but efforts to exploit this information should be increased.

Action 8:

Filling Seabed Knowledge Gaps

A programme of sampling the marine and coastal environment will be developed by the SSMEI pilot using the broadscale habitat map and local knowledge as a tool to target locations where they may fulfil the following:

- a suspected damaged habitat or ecosystem;
- sites perceived as being particularly important in a Shetland or Scottish context but not covered by European or international obligations;
- sites which are perceived to hold particularly high species richness;
- sites that are developed for the purpose of demonstrating or carrying out research on particular management approaches; and
- sites initiated by local communities and which can be shown to bring benefits to those communities, such as Lamlash Bay

Justification

The cost and effort required to physically survey the sea is very high. Rather than sample blindly (which would cost millions of pounds to cover the seabed around Shetland), the broadscale habitat map will be used to target a survey along an important environmental gradient, working with local industry, government bodies and NGO's.

Action 9:

Identifying Marine Protected Areas

Locations will be identified on maps that are not protected by statutory designation, but are areas regarded by competent authorities as being worthy of protection for a variety of reasons, such as a locally important species or habitat, a viewpoint, local historic interest, or open space.

Each site proposal would make clear:

- current information on its state;
- the proposed management arrangements; and
- what we anticipate in terms of monitoring arrangements.

Policy will be developed to maintain these areas free from damaging development.

Justification

The Scottish Marine Bill proposals outlined in "Sustainable Seas for All: a consultation on Scotland's first marine bill" propose to make provisions for powers to be used to identify, designate or recognise new marine areas up to high water mark.

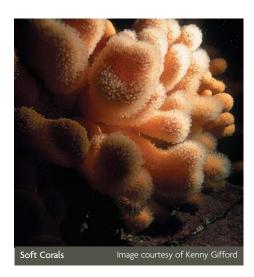
Site protection in the marine environment can be a very effective tool for achieving nature conservation objectives and there is scope for considerable variety in the range and types of marine protected sites.

The purpose of this action is to comply with the new Marine Act, and subject to the power granted, we propose to identify, designate or recognise particular locations of biodiversity importance i.e. habitats or species which are important, rare, threatened, representative or which contribute to a wider network.

One way would be to prioritise those sites richest in biodiversity, and perhaps those which have been least damaged. Multiple uses

for sites will be assumed, with restrictions only on those activities which are likely to have a significant or adverse effect on the features for which sites are selected. No unnecessary restrictions will be put on activities which are not likely to damage those features for which a site is selected. Sites will be managed within the context of sustainable development. Where socioeconomic uses are compatible with the aims of the site, there will not be a presumption against such activities taking place in conservation sites.

It is not just locally important species and habitats that are in need of stronger protection: as new Archeological sites are uncovered, these will need protection if they have not been associated with a designation, EU legislation or worldwide status.

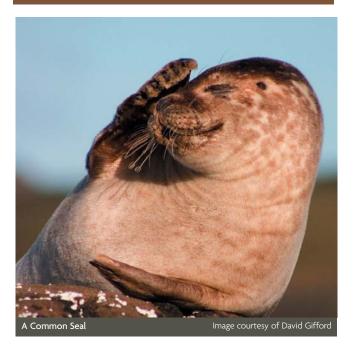


Action 10:

Filling Data Gaps

Some data was not mapped in time for the production of this Plan. This may be because it does not exist or is in a format that requires further survey work. Efforts will be made to gather further data on:

- Areas suitable for wet renewables (based on better data than currently exists)
- Seaweed harvesting
- Winkle picking
- Intertidal bait gathering
- Fish aggregating devices
- Artificial reefs
- Vegetated shingle (a habitat protected under the Habitats Directive)
- Vegetated sea cliffs (a habitat protected under the Habitats Directive)
- Important burns for angling
- Wading birds
- Rare seaweeds
- Seals and cetaceans data around Fair Isle and Foula



Justification

There is now a central storage of data in maps (the Shetland Marine Atlas) which, combined with the policy framework, will guide users in the placement of activity that will take account of other uses and resources.

However gaps in the data exist, and this affects how we deliver benefits in how we manage our seas. This data will be prioritised with a view to contributing to our aim of healthy and biologically diverse seas, for example by providing a better basis on which to consider applications for uses of our seas in specific locations.

Action 11:

Developing Sub-Area Marine Spatial Plans

More area-specific marine spatial plans will be developed for different areas around Shetland. These will be more aspirational and make better use of information as it becomes available.

Justification

The current plan is overarching due to the geographic scale of the archipelago and has therefore been unable to consider the aspirational objectives of the different marine sectors and communities. These can be more appropriately addressed at the local-level through subarea marine spatial plans. The ongoing work with the local community of Fair Isle to develop a sub-area plan are addressing some of these issues and the current research efforts show considerable promise in solving these challenges. However the needs and demands for better marine data, management and monitoring carry substantive resource implications.

Action 12:

Encouraging New Aquaculture Development

The scope for encouraging innovative or prototype aquaculture developments without huge planning permission costs should be researched.

Justification

Since aquaculture developments fell for determination under the Town and Country Planning (Scotland) Act 1997, as amended, Planning Permission costs have significantly increased in comparison to the cost of a Works License under the pervious regime. The charge is at a level that is a disincentive to developing innovative techniques, including the trial of new species and equipment. New ways of avoiding this burden of cost will be sought.

SENSITIVITIES OF MARINE LIFE

Action 13:

Identifying Sensitive Areas

A new partnership will be established that will combine local knowledge with the spatial analysis of the maps in GIS. The Group will identify locations of species and habitat sensitivity from various human impacts.

Justification

Information on the relative sensitivity of marine species to human impacts is sometimes difficult to determine: a cause-effect relationship is particularly difficult when the species moves around a geographic area. The Shetland Marine Atlas is a useful aide in identifying the spatial extent of the activities and important species and habitats.

Some effort has been made to identify the potential impacts from the activity and which species or habitat are particularly sensitive to it (Appendix 6). These maps will be overlain with one another and used as a tool to help a stakeholder group identify hot-spots of vulnerability.

Models in GIS to extrapolate sensitivity do exist, however the current methods and output were not considered robust enough.

IDENTIFYING DAMAGED ECOSYSTEMS

Action 14:

Identify and Restore Damaged Habitats and Ecosystems

Using the information gathered from Action 8, a new partnership will be established and encouraged to develop adaptive management strategies and mitigation measures to restore and prevent further damage to habitats and ecosystems. This would balance the extent of damage with the practical feasibility of restoration and other users.

Justification

The health of habitats and ecosystems is critical to sustaining a productive sea and restoration can help to support economic growth. The ultimate goal of the management process of Marine Spatial Planning must be to bring together information on activities, habitat data and sensitivity to impacts in order to avoid significant conflicts and impacts.

MONITORING AND REVIEW

Monitoring

This Marine Spatial Plan provides a framework for the sustainable development of marine activities and is the first step in providing support for the protection of important species and habitats.

Initially the many partner organisations should revisit their departmental and corporate strategies, the work of which will be influenced by the proposals outlined here.

Feedback on this draft will be encouraged to determine any added value to current marine management. The outcome of this, together with Strategic Environmental Assessment on the Plan will ensure a further comprehensive draft to be produced for consultation.

Communication

This Plan is for everyone in Shetland. It is important that it is widely available and relevant. Where copyright agreement allows, data on planning constraints is available for use in GIS and Google Earth™. As the Plan and its supporting maps will be continually updated, most recent versions can be found at http://www.nafc.ac.uk/SSMEI.aspx. Paper copies can be requested from the NAFC Marine Centre in Shetland.

Review

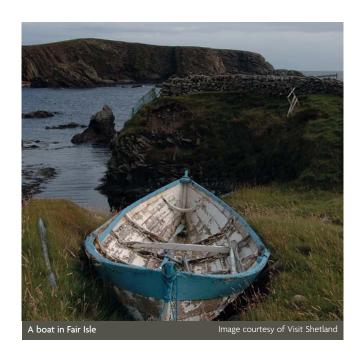
This is the second draft of the Shetland Marine Spatial Plan and it is intended to grow, change, develop, and gain status as it becomes increasingly relevant to the management of the marine environment around Shetland. This Plan will be updated to account for increasing knowledge and changes in national priorities (estimated every 5 years), but initially reviewed after 2 - 3 years to account for the Scottish Marine Act and its secondary legislation.

The review should provide opportunities for changing circumstances and new ideas to be accommodated within a potential future Marine Spatial Planning system.



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GLOSSARY

Amenity: the physical and social features of settlements and countryside that contribute to creating a comfortable and desirable living environment.

Appropriate Assessment (AA): The purpose of Appropriate Assessment is to ensure that protection of the integrity of European sites is a part of the planning process at a regional and local level. The requirement for Appropriate Assessment of plans or projects is outlined in Article 6(3) and (4) of the European Communities (1992) Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora ("Habitats Directive").

Bathymetric (noun: Bathymetry): the depth of the seabed, analogous to topography (on land). A bathymetric reading or survey is therefore a measurement of the depth of the seabed. Such a survey is usually conducted acoustically.

Benthic (noun: benthos): the plants and animals which live on the seabed.

Biodiversity: the variety (within and between species) of living things from all sources (terrestrial, marine, aquatic).

Biological Records Centre: the core element of the Shetland Biological Records Centre (SBRC) is a comprehensive database containing up-to-date information about Shetland's wildlife. The information is available to everyone.

Biotope: a discrete physical habitat with its associated community of animals and plants.

Birds Directive: EC Directive 79/409/EEC on the Conservation of Wild Birds. Requires member states to sustain populations of naturally occurring wild birds by sustaining areas of habitats to maintain ecologically and scientifically sound levels.

BOCC (Birds Of Conservation Concern): Birds of Conservation Concern are bird species suffering decline in the European and global context. The Royal Society for the Protection of Birds (RSPB) have identified and classified these species by the rate of decline into a red list and an amber list.

Breeding area: a site used by one or more species mainly for the purpose of reproduction and birthing.

CAR (Controlled Activities Regulations): bring into effect requirements of The Water Environment (Controlled Activities) (Scotland) Regulations 2005 (as amended) (CAR).

Character: A combination of features which distinguish an area. These each include architectural styles, main uses, landscape type, etc. A proposal would be 'out of character' if it introduced features not in keeping with those which make up an area's existing character.

Coast Protection Act (CPA), 1949: affects works below MHWS, deposit and/or removal of object/materials. Imposes restrictions on works detrimental to navigation.

Conservation: action(s) resulting in the preservation of the natural environment.

Cumulative: created by successive additions (for example of impacts).

The Dangerous Substances Directive (76/464/EEC): defines principles for the control of lists of substances ranging from those which are toxic, persistent and which bioaccumulate, to those which have "deleterious effect upon the aquatic environment". Some chemicals used within marine fish farming fall within the latter description.

Designated Sites: these are sites that are designated for their value for nature conservation or their landscape value.

Development Plan: comprises the Structure Plan and the relevant Local Plan. These documents are the basis for determining planning applications.

Development: definition as per Town and Country Planning (Scotland) Act 1997.

Ecological processes: dynamic biological and physical processes, for example natural cycles, currents, sediment movements, nutrient cycling, community and trophic structures and migratory species movements.

Ecosystem: structure, process, functions and interaction among organisms, including humans, and their non-living environment.

Ecosystem Approach: the integrated management of multiple human activities based on knowledge of ecosystem dynamics to achieve sustainable use of ecosystem resources and maintenance of ecosystem integrity. Managed within the ecological constraints on which the environment depends.

Eelgrass beds: area where flowering marine plants grow in marine or brackish waters.

Electricity Act, 1989: electricity generation including offshore wind farms.

Environmental Impact Assessment (EIA): a study based on expert professional opinion which gives a detailed assessment of a particular development and its impact upon the social and physical environment of the surrounding area.

FEPA: Part II of the Food and Environment Protection Act 1985 (Deposits in the Sea). Covers all construction, coastal defences, disposal of waste and burial at sea.

Fully-functioning ecosystem: The protection and maintainance of the physical structures which support, and the biological communities or ecosystem composition which manage ecological functions. Even if we do not understand exactly how a marine or coastal ecosystem works, it is still important to keep all the parts in the system and to retain the energy, nutrient, and biotic flows within and between the various parts of the ecosystem.

Geographical Information Systems (GIS): a system for creating, storing, analysing and managing spatial data and associated attributes. Their main outputs are maps, called layers, but graphs and summary statistics can also be produced (for example in calculating what % area is designated for conservation).

Geomorphology: the study of landforms (in this case the coastline), including their origin and evolution, and the processes that shape them.

Habitat: the environment in which a species lives at any stage in its life cycle.

Habitat Directive: in May 1992, the member states of the European Union adopted the 'Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora'. The main aim of the Directive is to promote the maintenance of biodiversity and, in particular, it requires member states to work together to maintain or restore to favourable conservation status certain rare, threatened, or typical natural habitats and species. These are listed in Annex I and II respectively. One of ways in which member states are expected to achieve this aim is through the designation and protection of a series of sites, known as Special Areas of Conservation (SACs).

Harbours Act (and Lerwick Harbour Act, 1994), 1964: the primary legislation under which harbour works are authorised.

Historic Scotland: the body responsible for safeguarding Scotland's built heritage.

Impact: a human disturbance which causes a change in a population's composition, abundance, or distribution. Examples of impacts include: effect of waste discharge on eelgrass and scouring of vegetation from boating activities in shallow water.

Infrastructure: pipelines, cables, wrecks, Archeological remains, shore access, barges, pontoons, shellfish growing equipment, offshore renewable energy structures, weather and radar masts, buoys and anchorage.

Intertidal: the area of coast between the mean high water level and mean low water level.

Local Agenda 21: at the earth summit in Rio in 1992, the UK agreed to promote a programme of measures aimed at sustainable development. This programme is called Agenda 21. Shetland Islands Council is responsible for taking forward these programmes in Shetland with the involvement of the local community.

Local Biodiversity Action Plan (LBAP): a document for use by all kinds of organisations to help sustain biodiversity.

Local Plan: a detailed land-use planning document prepared by Unitary and Island Councils setting out specific policies and proposals in accordance with the Structure Plan.

Managed Realignment: one of several 'soft' engineering options available. In most cases it involves breaching an existing coastal defence, such as a sea wall or an embankment, and allowing the land behind to be flooded by the incoming tide. This land is then left to be colonised by saltmarsh vegetation. When established, the vegetation disperses wave energy during storm events, reduces erosion rates and provides an important habitat for coastal flora and fauna. If the newly breached area is backed by low-lying land, a new embankment is usually constructed beforehand on the landward side of the site to reduce the risk of flooding. Although a relatively new idea, it is widely recognised that managed realignment can reduce the costs of coastal defence whilst offering numerous environmental benefits.

Marine Consultation Areas (MCAs): areas identified by SNH (Scottish Natural Heritage) as deserving of protection by reason of the quality and sensitivity of the marine environment. MCAs have no statutory basis, however Shetland Islands Council consult SNH on proposals that could damage the interests of the site.

MHWS (Mean High Water Spring): predicted high water heights of Spring Tide over a period of approximately 19 years.

Modiolus modiolus: the horse mussel Modiolus modiolus forms dense beds at depths of 5-70 m in fully saline, often moderately tide-swept areas off northern and western parts of the British Isles. Although it is a widespread and common species, true beds forming a distinctive biotope are much more limited. M. modiolus is a long-lived species and individuals within beds are frequently 25 years old or more. Juvenile M. modiolus are heavily preyed upon, especially by crabs and starfish, until they are about 3-6 years old, but predation is low thereafter. There have been no studies of the recovery of damaged beds but full recovery after severe damage would undoubtedly take many years at best and may not occur at all.

National Planning Policy Guidelines (NPPGs): provide statements of the Scottish Government policy on nationally important land use and other planning matters, supported where appropriate by a locational framework.

National Scenic Areas (NSAs): areas that are nationally important for their landscape quality. There are stricter planning controls within NSAs and planning authorities have to take care that new development does not detract from the scenic quality of the area.

Nursery area: habitats providing shelter and food to marine fauna during the vulnerable, juvenile stages of life (for example eelgrass habitats are nurseries for many species of fish).

Ophiura brittlestar: brittlestars tend to live in dense communities on the seabed, and amongst some species the density is 100s to 1000s per square metre. The animals live on tide-swept seabeds where the surface is either rocky or of mixed substrata, and they link their "arms" together in order to secure their position on the seabed, whilst other "arms" are raised in order to filter and catch food from the passing water. Brittlestars tend to be a "keystone species" i.e. other marine species live in association with them and are dependent upon them for some essential function (i.e. food, shelter). Ophiura brittlestars are a particular species. They live in communities, but not at the same density as some other brittlestar species. Ophiura brittlestars tend to live in the North Sea where many other species of brittlestar are not to be found.

OSPAR: Convention for the Protection of the Marine Environment of the North-East Atlantic (Oslo and Paris Commissions) Planning Advice Notes (PANs): produced by the Scottish Government providing advice on good practice and other relevant information.

Precautionary Principle: A principle adopted by the UN Conference on the Environment and Development (1992) that in order to protect the environment, a precautionary approach should be widely applied, meaning that where there are threats of serious or irreversible damage to the environment, lack of full scientific certainty should not be used as a reason for postponing cost-effective measures to prevent environmental degradation. The precautionary principle permits a lower level of proof of harm to be used in policy-making whenever the consequences of waiting for higher levels of proof may be very costly and/or irreversible.

Productivity: the rate at which radiant energy is used by producers to form organic substances as food for consumers.

Protect: to shield from harm.

Ramsar Sites: wetland areas of high ecological value. Designated under the Convention on Wetlands of International Importance.

Reef: subtidal and intertidal rocky outcrops supporting diverse assemblages of marine flora and fauna.

Salt marsh: coastal wetland plant community dominated by herbs and low shrubs and located in the upper intertidal areas of the coast (often on the landward side). Salt marsh areas are usually waterlogged and frequently flooded with saltwater by the tide. Salt marsh assemblages may extend inland for several hundred kilometres and can contain other terrestrial salt tolerant plants.

Safeguarding Our Seas: the first UK Marine Stewardship Report

Scottish Environment Protection Agency (SEPA): the public body responsible for environmental protection in Scotland. Its main aim is to provide an efficient and integrated environmental protection system for Scotland that will both improve the environment and contribute to the Scottish Ministers' goal of sustainable development. Full details are available from www.sepa.org.uk

Scottish Natural Heritage (SNH): an independent body responsible to the First Minister whose task it is to secure the conservation and enhancement of Scotland's natural heritage. SNH aim to help people to enjoy Scotland's natural heritage, understand it more fully and use it wisely so that it can be sustained for future generations.

Scottish Planning Policy (SPP): provide statements of the Scottish Government policy on nationally important land use and other planning matters, supported where appropriate by a locational framework.

Seabird: aerial birds (such as Gannets) and swimming birds (such as Puffins) usually seen at sea.

Sites of Special Scientific Interest (SSSIs): areas of special interest by reason of their flora, fauna, geological or physiographical features. Notified under the Wildlife and Countryside Act, 1981.

Spawning area: habitats critical to the spawning stage of the reproductive cycle. Spawning areas are often geographically distinct from nursery areas; for example, Monkfish spawn in deeper waters but their larvae drift into sheltered coastal areas around Shetland.

Special Areas of Conservation (SACs): areas identified as supporting rare, endangered and vulnerable habitats or species. Designated under European Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Flora and Fauna (the 'Habitats Directive'). Together with SPAs they form the Natura 2000 network of protected sites across the European Community.

Special Protection Areas (SPAs): important habitats for rare, threatened or migratory birds. Classified under European Directive 79/409/EEC on the Conservation of Wild Birds, (the 'Birds Directive').

Strategic Environmental Assessment (SEA): the process of assessing policies, plans and programmes (rather than individual projects) for their environmental impacts.

Structure Plan: sets out the strategic land-use policy framework over a wide area and is prepared by either Unitary or Islands Councils. Consists of a Written statement, a Key Diagram and a Report of Survey.

Subtidal: benthic area from the low tide line to the seaward edge of the continental slope.

Sustainable Development: this means enabling development that meets today's needs without compromising the ability of future generations to meet their own needs. In other words, it means promoting better quality of life and better quality environments for ourselves and for our children and grandchildren. Sustainable development is a key aim of Shetland Islands Council and the UK Government.

Sustainable use: the use of components of biological diversity in a way and at a rate that does not lead to the long-term decline of biological diversity, thereby maintaining its potential to meet the needs and aspirations of present and future generations.

Telecommunications Act, 1984: affects the placement of subsea cables (including placing any buoy or seamark) and anything conflicting with its use.

Transport & Works Act, 1992: large works on land and at sea.

Use: economic, recreational, social or cultural activities in the marine and coastal environment that may not be directly associated with development, and as such, may not be subject to regulation, for example, commercial and recreational fishing.

Wastewater: usually refers to the discharge of sewage, or effluent from a process.

Water Framework Directive (WFD): EC Directive 2000/60/EC. Requires member states to achieve good ecological status of coastal water bodies. Sets framework for integrated catchment management (which includes the sea to 3 miles) requiring River Basin Management Plans.

The Water Environment and Water Services Act 2003 (WEWS Act): transposes the Water Framework Directive into Scots law. The aim of WEWS is to protect the water environment whilst also supporting the social and economic interests of those who depend on it.



APPENDIX 1: LIST OF POLICIES AND STRATEGIES TAKEN INTO ACCOUNT IN PREPARING THE PLAN

International Strategies and Policies

- United Nations Convention on the Law of the Sea (UNCLOS)
- International Maritime Organization (IMO) Conventions
- Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, 1972 (The London Convention)
- OSPAR Convention
- Convention on Biological Diversity (CBD)
- UN Framework Convention on Climate Change
- World Summit for Sustainable Development 2002.

European Strategies and Policies

- European Spatial Development Perspective
- 6th Environmental Action Plan -European Marine Thematic Strategy
- Integrated Coastal Zone
 Management Recommendation
- European Commission White Paper on Transport
- Common Fisheries Policy
- Water Framework Directive
- Habitats and Birds Directives

- Strategic Environmental Assessment and Environmental Impact Assessment Directives.
- Shellfish Waters Directive (79/923/EEC) and the Directive Laying Down the Health Conditions for the Production and the Placing on the Market of Bivalve Molluscs (91/492/EEC), commonly known as the Shellfish Hygiene Directive.

UK/National Strategies and Policies

- UK Sustainable Development Strategy
- Safeguarding our Seas
- Seas of Change & the Government's Response to Seas of Change
- Water Framework Directive
- Sectoral Policies the sectoral nature of the management of human activities in the marine environment has given rise to a large number of disparate sectoral policies relevant to the plan. Examples include:
 - Fisheries Securing the Benefits (Defra et al, 2005);
 - Ports Modern Ports: A UK Policy (DfT, 2000);
 - Shipping British Shipping: Charting a New Course (DETR, 1998);
 - Flood and Coastal Erosion Risk -Making Space for Water (Defra, 2004);

- Energy Generation Energy White Paper (DTI, 2003);
- Sport and Recreation –
 Department of Culture Media and Sport;
- Mineral Extraction Minerals
 Planning Guidance note 6
 (DETR, 1994); Marine Minerals
- o Guidance Note 1 (ODPM, 2002).

Regional Policies and Strategies

- Cultural Heritage Resources
 - National Planning Policy
 Guidance Note 18: Planning and the Historic Environment
 - National Planning Policy
 Guidance Note 5: Archaeology
 and Planning.
- Biodiversity, Geological and Nature Conservation
 - Biodiversity: The UK Action Plan
 - Safeguarding our Seas A strategy for the conservation and sustainable development of our marine environment
 - Regional and Local Biodiversity Action Plans
 - National Planning Policy
 Guideline 14: Natural Heritage.

Oil & Gas Exploration and Production

 Energy White Paper: Our Energy Future - Creating a Low Carbon Economy.

· Renewable Energy

- Energy White Paper: Our Energy Future - Creating a Low Carbon Economy
- Scottish Planning Policy 6: Renewable Energy.

• Mineral Extraction

 Scottish Planning Policy 4: Planning for Minerals.

• Fisheries and Shellfisheries

- Common Fisheries Policy:
 Council Regulation (EC) N.
 2371/2002. Official Journal of the European Communities
- A strategic framework for inshore fisheries in Scotland action plan 2005.

Aquaculture

- Scottish Planning Policy 22:
 Planning for Fish Farming
- A Strategic Framework for Scottish Aquaculture.

Climate Change

- Regional climate impacts overviews
- Climate change and local communities - How prepared are you?

- Building Knowledge for a Changing Climate
- Scottish Planning Policy 7: Planning and Flooding.

• Water Quality

- OSPAR Convention for the Protection of the Marine Environment of the North East Atlantic.
- Hazardous Substances Strategy
- OSPAR Eutrophication Strategy
- OSPAR Radioactive Substances Strategy
- Regulations implementing the Water Framework Directive.

• Management of the Coastal Zone

- National Planning Policy
 Guideline 13: Coastal Planning
- Scottish Planning Policy 7: Planning and Flooding.

Cables

Communications White Paper;
 A New Future for
 Communications.

• Oil & Gas Interconnectors

 Energy White Paper: Our Energy Future - Creating a Low Carbon Economy

Flood Defences and Coast Protection

Scottish Planning Policy 7:
 Planning and Flooding

National Planning Policy
 Guideline 13: Coastal Planning.

• Recreation and Leisure

- National Planning Policy
 Guideline 13: Coastal Planning
- Scottish Planning Policy 11: Open
 Space and Physical Activity.

Ports

- Integrated Transport White Paper 'A New Deal for Transport: Better for Everyone'
- Sustainable Distribution: A Strategy
- o Modern Ports : A UK policy.

Shipping

- British Shipping: Charting a New Course, 1998
- White Paper on the Future of Transport 1998.

APPENDIX 2: SHETLAND PARTICIPATION IN SSMEI

Local Steering Group organisations represented:

Association of Shetland Community Councils (John Ridland to January 2007 / Bobby Hunter from October 2007)

BP (Theo Smith)

Fair Isle Marine Environment and Tourism Initiative (Nick Riddiford)

Friends of the Earth Scotland (Vic Thomas)

Scottish Environmental Protection Agency (David Okill)

Scottish Natural Heritage (John Uttley))

Scottish Sustainable Marine Environment Initiative (Lorraine Gray)

Seafood Shetland (Ruth Henderson)

Shetland Amenity Trust (Biological Records Centre) (Paul Harvey)

Shetland Aquaculture (David Sandison)

Shetland Fishermen's Association (Hansen Black)

Shetland Islands Council (Coastal Zone Manager) (Martin Holmes)

Shetland Islands Council, Planning (Heritage) (Austin Taylor)

Shetland Islands Council (Councillor) (Bill Manson)

Shetland Islands Council, Planning (Development) (Suzanne Shearer or Hannah Nelson)

Shetland Shellfish Management Organisation (Campbell Jamieson to January 2007 / Ryan Leith from October 2007)

Royal Society for the Protection of Birds (Pete Ellis)

Biodiversity Working Group organisations represented:

RSPB (Pete Ellis)

SEPA (Janet Davies)

Shetland Amenity Trust (Biological Records Centre) (Paul Harvey)

Shetland Islands Council, Planning (Heritage) (Austin Taylor)

SSMEI (Lorraine Gray)

SNH (Karen Hall and Chris Leakey)

SOTEAG / University of Aberdeen (Martin Heubeck)

Spatial Analysis Working Group organisations represented:

SEPA (Janet Davies)

Shetland Aquaculture (David Sandison)

Shetland Islands Council, Planning (Heritage) (Kelda Hudson)

Shetland Islands Council, Port and Harbours Operations (Barry Edwards)

SSMEI (Lorraine Gray)

SNH (Karen Hall and Chris Leakey)

Policy Development Working Group organisations represented:

RSPB (Pete Ellis)

Shetland Aquaculture (David Sandison)

Shetland Fishermen's Association (Hansen Black)

Shetland Islands Council, Planning (Development) (Suzanne Shearer)

Shetland Islands Council, Planning (Heritage) (Kelda Hudson)

SSMEI (Lorraine Gray)

SNH (Karen Hall)

Other people and organisations directly involved:

Aith Boating Club, Archaeology (Shetland Amenity Trust), Delting Boating Club, Fishermen, Lerwick Port Authority, Mid Yell Boating Club, NAFC Marine Centre, Seabirds and Seals (boat tours), Shetland Angler's Association, Shetland Islands Council (Ferry Operations Division), Reawick and District Boating Club, Trondra Rowing Club, Whiteness and Weisdale Boating Club, Zetland Sub Aqua Club.

APPENDIX 3: Works license policies

General Policies

- G1 In determining applications for Works Licenses, the Council will take account of, inter alia, the following factors:
 - The need to ensure that safe navigation is maintained.
 - Potential effects, including cumulative, on the environment and natural heritage interests.
 - The implications for fishing interests.
 - Existing marine fish farms in the locality.
 - The implications for recreational and other interests.
 - The availability of any necessary infrastructure and potential impact on existing infrastructure, when relevant.
- G2 The Council will take account of the views of all interested parties, including competent and relevant bodies and local communities, in its determination of Works License applications.
- G3 Works Licenses will be determined with due regard to relevant national and local polices and guidance in place at the time of the application.
- G4 It shall be a condition of all Works Licenses granted that licensees must comply with all relevant statutory controls currently in force or which come into force during the period in which their works License remains valid. A failure to comply with any relevant statutory control, or a breach of any condition of the Works License which is brought to the Council's attention will be investigated and may, if circumstances warrant it and the Council consider it appropriate, result in the Works License being revoked.

- G5 In respect of all Works Licenses approved pursuant to this policy, if no works are present during any continuous period of 3 years on a site for which a Works License has been granted the relevant Works License would cease to have effect. In that case, the licensee will take appropriate steps in correspondence with the Council to seek either an extension of time or approval to commence development. The Council will not be unreasonable in dealing with either of these requests but where neither scenario happens or there continues to be no development on site, the Council may initiate revocation proceedings.
- G6 In calculating the 3 year period, no account will be taken of any period where works were removed to comply with notices or orders served under other legislation.
- G7 Works Licenses may only be transferred to a new licensee with the Council's prior written consent. A written application to transfer the License must be made to the Council who will not unreasonably withhold any such request. Failure to obtain the Council's consent may result in the Council revoking the License.
- G8 Works License applications will be dealt with by the Council on a first come, first served basis. Where the Council has a pre-existing application, any subsequent applications that are made in the area of the initial application will be recommended for refusal on the basis that the application process is in train for a previous applicant.
- G9 Appropriate lights, buoys or beacons that comply with the International Association of Lighthouse Authorities' guidelines must mark any installations close to navigation channels, or which may otherwise be a danger to navigation. Such markings must be specified in the Works License following consultation between the Council's Ports and Harbours Operations and the Northern Lighthouse Board.

G10 Where a Works License application is made to the Council for development adjacent to or within a Natura 2000 site (Special Area of Conservation or Special Protection Area) designated under either the Habitats or Birds Directives, the Council, as competent licensing authority, will undertake an appropriate assessment of the development as required under Regulation 48(1) of the Conservation regulations 1994. Should such an assessment indicate that the development will have an adverse effect on the integrity of any Natura 2000 site, the Council will be minded to refuse the application as required by the 1994 Regulations. Additionally the Council will take proper account of Articles 12, 13 and 16 of the Habitats Directive in respect of European protected species when considering works License applications.

Constructions (Piers, Breakwaters, Marinas and Other Constructions)

- C1 Works License applications for other marine constructions will be determined with regard to relevant local and national policies, local and national guidelines and any representations received. For the avoidance of doubt, constructions include those lengths of piped septic tanks outfalls that cross the foreshore below MHWS.
- C2 All applications for works Licenses for floating pipes connecting shore feeding bases to floating cages will be considered on a case by case basis with due consideration being given to their specific merits such as location, navigation aspects, impact on other users, etc.



APPENDIX 4: USEFUL CONTACTS FOR LICENSES /

PERMIT INFORMATION

Bodies consulted on for Works License and Planning Applications:

Community Council within which the application lies The Association of Community Councils, Lerwick, Shetland (01595 743906)

Bidwell's (Agents for the Crown Estate)
Bidwell's Property Consultants, Inverness (01463 723562)

Historic Scotland Longmore House, Salisbury Place, Edinburgh EH9 1SH. 0131 6688600

Lerwick Port Authority
Albert Building, Lerwick, Shetland ZEI OLL (01595 692991)

Royal Society for the Protection of Birds (RSPB) Sumburgh Head Nature Reserve, East House, Sumburgh Head Lighthouse, Shetland ZE3 9JN (01950 460800)

Scottish Environment Protection Agency (SEPA)
Esplande, Lerwick, Shetland ZEI OLL (01595 696926)

Scottish Government Marine Directorate (SGMD) (previously SEERAD)

Victoria Quay, Edinburgh EH6 6QQ (0131 244 0000)

Scottish Natural Heritage (SNH)
Stewart Building, Alexandra Wharf, Lerwick, Shetland
ZEI OLL (01595 693345)

Shetland Amenity Trust (Archaeology)
Garthspool Lerwick Shetland ZEI ONY (01595 694688)

Shetland Islands Council, (relevant Councillor for area) (01595 693535)

Shetland Islands Council, Planning (Land)
Grantfield, Lerwick, Shetland ZEI ONT (01595 744800)

Shetland Islands Council, Planning (Marine) NAFC Marine Centre, Port Arthur, Scalloway, Shetland ZEI 0UN (01595 772000)

Shetland Islands Council, Environmental Health Grantfield, Lerwick, Shetland ZEI ONT (01595 744800)

Shetland Islands Council, Port and Harbour Operations Port Administration Building, Sella Ness, Sullom Voe, Shetland ZE2 9QR (01806 244200)

Shetland Fishermen's Association (SFA) Shetland Seafood Centre, Stewart Building, Lerwick, Shetland (01595 693197)

Other bodies may be consulted on specific matters, if appropriate:

Biological Records Centre, Shetland Amenity Trust Garthspool Lerwick Shetland ZEI ONY (01595 694688)

Fisheries Research Services, Environment Protection Group PO Box 101, 375 Victoria Road, Aberdeen AB11 9DB (01224 876544)

SEPA Planning Unit (North)

Graesser House, Fodderty Way, Dingwall Business Park, Dingwall IV15 9XB

Seafood Shetland Stewart Building, Lerwick ZEI OLL (01595 693644) Shetland Shellfish Management Organisation Stewart Building, Lerwick ZEI OLL (01595 693644)

Fair Isle Marine Environment and Tourism Initiative Fair Isle, Shetland ZE2 9JU (01595 760 224)

Shetland Aquaculture
Stewart Building, Lerwick ZEI OLL (01595 695579)

Shetland Islands Council, Planning (terrestrial not marine) Grantfield, Lerwick, Shetland ZEI ONT (01595 744800)

APPENDIX 5: AQUACULTURE POLICIES EXTRACTED FROM THE INTERIM POLICY FOR MARINE AQUACULTURE, 2007

1. GENERAL POLICIES

- G1 In determining applications for planning permission, the Council will take account of, inter alia, the following factors:
 - The need to ensure that safe navigation is maintained.
 - Potential effects, including cumulative, on the environment and natural heritage interests.
 - The implications for fishing interests.
 - Existing marine fish farms in the locality.
 - The implications for recreational and other interests.
 - The availability of any necessary infrastructure and potential impact on existing infrastructure, when relevant.
- G2 The Council will take account of the views of all interested parties, including competent and relevant bodies and local communities, in its determination of planning applications.
- G3 Planning applications will be determined with due regard to relevant national and local polices and guidance in place at the time of the application.
- A fish farm, Scalloway Islands Image courtesy of Kenny Gifford

- G4 It shall be a condition of all planning permissions that developers must comply with all relevant statutory controls currently in force or which come into force during the period in which their planning permission remains valid. A failure to comply with any relevant statutory control, or a breach of any condition which is brought to the Council's attention will be investigated and may, if circumstances warrant it, result in the Council taking appropriate enforcement action.
- G5 In respect of all planning permissions approved pursuant to this policy, if no equipment is present during any continuous period of 3 years on a site for which planning permission has been granted the relevant planning permission will lapse. In that case, the developer will take appropriate steps in correspondence with the Council to seek either an extension of time or approval to commence development, both of which may require further application.
 - The Council will not be unreasonable in dealing with either of these requests but where neither scenario happens or there continues to be no development on site, the Council may initiate revocation proceedings.
- G6 In calculating the 3 year period, no account will be taken of any period where equipment is removed from a site for the purposes of pollution, environmental or disease control, or in order to comply with orders or notices served under other legislation. 'Equipment' does not apply to either finfish, shellfish or other live organisms.
- G7 Planning applications will be dealt with by the Council on a first come, first served basis. Where the Council has a pre-existing application, any subsequent applications that are made in the area of the initial application will be recommended for refusal on the basis that the application process is in train for a previous applicant.

- G8 Appropriate lights, buoys or beacons that comply with the International Association of Lighthouse Authorities' guidelines must mark any installations close to navigation channels, or which may otherwise be a danger to navigation. Such markings must be specified in the planning permission following consultation between the Council's Ports and Harbours Operations and the Northern Lighthouse Board.
- G9 Where a planning application is made to the Council for development adjacent to or within a Natura 2000 site (Special Area of Conservation or Special Protection Area) designated under either the Habitats or Birds Directives, the Council, as competent authority, will undertake an appropriate assessment of the development as required under Regulation 48(1) of the Conservation regulations 1994. Should such an assessment indicate that the development will have an adverse effect on the integrity of any Natura 2000 site, the Council will be minded to refuse the application as required by the 1994 Regulations. Additionally the Council will take proper account of Articles 12, 13 and 16 of the Habitats Directive in respect of European protected species when considering planning applications.

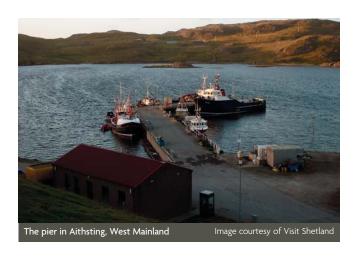
2. MARINE AQUACULTURE

- M1 For the avoidance of doubt, the Council will normally be minded to accept applications to vary existing sites closer than the relevant separation distance required by policy provided the proposed variation does not result in any increase to the existing licensed mooring containment area or increased environmental impact.
- M2 All applications for new or extended marine aquaculture developments must be submitted with a mooring specification that is suitable for the proposed development.
- M3 All marine aquaculture proposals will be considered in the light of codes of practice that the Council may adopt and optimum standards of sustainable site management, husbandry practices and general efficiency. In assessing these factors the Council will consider them against current best practice guidelines published by relevant recognised bodies or competent authorities. In the case of new and experimental species the applicant must demonstrate that these objectives are fully considered during the development of proposals, within the constraints of scientific knowledge, research evidence and practical experience prevailing at the time of application.



- M4 All marine aquaculture proposals must demonstrate that anti-predator measures deter or prevent predation through use of methods which are non-lethal and do not cause any significant harm. For the avoidance of doubt the use of monofilament nets for such purposes is not permitted.
- M5 In every case that requires alteration of the size or extent of either the surface works area or the mooring containment area of an existing site, the applicant will be required to submit a planning application for a variation to the site. In addition, any other significant changes to the scale or nature of the development, including an increase in biomass, the siting of feed barges, or change of species will require the submission of a planning application for a variation prior to any changes being made to the development.
- M6 With regard to the development of the culture of new or novel species, the Council will permit up to two cages of an existing facility to be given over to a new species for a single production cycle to allow developers the opportunity to assess the suitability of the site. Documentation showing that all species originated from hatcheries with a disease free status would be required to be submitted to the Council as would an application to vary the existing site prior to any changes being made. Thereafter, the developer would be required to indicate through a variation whether the site was to be utilised for either a single species in successive production cycles or different species in alternate production cycles. Applicants can apply for a variation to include new or novel species without the need for an initial assessment cycle. In all instances the site must be operated on a single species basis except for any initial assessment cycle. Where different species are being ongrown in alternate cycles, a fallow period of at least 6 weeks must be observed between introductions of fish.

- M7 Over time, the Council has adopted policies in coastal areas of Shetland where there is a general presumption against aquaculture development. Such policies are as follows:
 - (a) Fish farming will not as a matter of policy be permitted anywhere within the Sullom Voe Harbour Area (as defined in the Sullom Voe Harbour Revision Order 1980) for as long as its primary purpose is to accommodate vessels engaged in the carriage of hydrocarbons or other dangerous substances;
 - (b) No aquaculture developments will be permitted in Whiteness Voe north of a line between Usta Ness and Grutwick or the upper part of Weisdale Voe between the Taing of Haggersta and Vedri Geo;
 - (c) No further new aquaculture developments will be permitted in Busta Voe north of a line drawn between Hevden Ness, Mainland and Green Taing, Muckle Roe as a matter of policy, and variations to existing sites north of this line should not result in either an increase in site size, a change in site location or an increase in environmental or visual impact.



3. MARINE FINFISH DEVELOPMENTS

- F1 Planning permission will not be granted for finfish developments situated within 1,000m (measured as the water flows) of the extents of any other approved finfish farm or any water intakes/outfalls associated with shore based finfish rearing facilities, or within 500m (measured as the water flows) of the extent of any approved shellfish farm.
- F2 Where developers within an area seek to address issues of sustainability, biosecurity and environmental benefit through site relocation, amalgamation or revocation, the Council may be minded to seek greater separation distances than the minimum stated within this policy. To preserve these increased separation distance the Council may in addition be minded to refuse new applications for aquaculture developments in those areas created by site relocation, amalgamation or revocation. Industry should seek to achieve agreement with all licensees through either a Farm Management Agreement or Area Management Agreement.
- F3 The Council will assess applications for finfish sites on the basis of their cage surface area and surface works area. Its mooring containment area will define the overall area for which planning permission may be granted.
- Planning permission may be granted for sites that have a maximum cage surface area of 9,000 m2 and a maximum surface works area of 30,000 m2. If, after considering the information contained in the planning application, Environmental Statement, including any further information, any relevant comments or representations received as a result of publicity for the application, the Council may consider the above

maxima can be waived.

- F5 Single point mooring systems will be considered on their own merits but maximum cage surface area will be limited to 9,000 m2.
- F6 Each marine finfish development must remain part of a management regime so as to ensure that it is fallowed for the purposes of seabed recovery, disease and parasite control, in accordance with current best practice guidelines published by relevant recognised bodies or competent authorities. Any such regime may be managed solely by the developer or jointly so as to include marine finfish developments operated by other developers. In all cases prospective developers will have to state their proposed stocking, fallowing and other relevant operational practices at the time of applying for planning permission.
- F7 In any event, planning permission will only be granted for sites whose production, either in isolation or in conjunction with adjoining sites, will not have significant adverse effects on the environment of the site under application or the adjacent marine environment, insofar as current scientific method is able to determine.
- F8 Prior to commencing development, site specific containment and contingency plans detailing both the means by which risks of fish escapes are minimised and the steps to be taken in the event of a fish escape must be submitted to the Council. In addition, copies of the notifications submitted to SEERAD on either events giving rise to the potential for an escape of fish or an actual escape of fish must also be submitted to the Council through the Marine Management Department (NAFC Marine Centre).

4. MARINE SHELLFISH DEVELOPMENTS

- 51 Planning permission will not be granted for shellfish developments situated within 500m (measured as the water flows) of the extents of any other approved marine aquaculture developments, or any water intakes/outfalls associated with shore based shellfish washing and/or depuration facilities.
- S2 Where both the intake and outfall water supplies associated with shellfish washing and/or depuration facilities are subject to appropriate treatment, the Council may be minded to waive the minimum separation distances contained within this policy.
- 53 The Council will assess applications for shellfish sites on the basis of their surface works area. Its mooring containment area will define the overall area for which planning permission may be granted.
- S4 Planning permission for the suspended culture of shellfish will be restricted to a maximum surface works area of 50,000 m2.
- S5 Planning permission for the cultivation of shellfish in seabed structures will be restricted to a maximum seabed area of 10,000 m2 in respect of the extent of these structures.
- Whilst the Council may be minded not to approve applications for new aquaculture developments in those areas created through site relocation, amalgamation or revocation for the purposes of sustainability, biosecurity and environmental benefit, relocation of, or variations to, existing shellfish developments may be permitted provided they do not either exceed the size criteria or reduce the minimum separation distances allowed by this policy and form part of an AMA or FMA.

S7 The Council will assess applications for shellfish sites within a particular body of water with respect to its biological carrying capacity (i.e the total shellfish biomass that can be sustained within a water body). Where the proposed new development or variation to an existing site results in the carrying capacity being significantly exceeded, the Council may be minded to refuse such applications.



APPENDIX 6: MATRIX OF SENSITIVITIES

Assessment of potential impacts of developments and activities in the marine environment

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+ coastal Habitats + Ecosystems	low	*	•	,				1,0	ж	wol	medium		*	30		· •	high	wol	•0		300	low	(*)			.00					high	high	high	high	•
+ enthic Habitats emstrems	high	medium	wol	medium		-			medium	medium	medium	medium	1)	9		high	wol	medium	-		medium	medium		•	•	•	high	high	medium	high	high	high	high	high	•
Potential Impacts	Smothering of seabed	Physical damage to seabed habitat	Removal of food supply	Water quality changes	Escapees	Entanglement	Disturbance to wildlife (boat movements, acoustic deterrents)	Displacement	Smothering of seabed	Physical damage to seabed habitat	Removal of plankton	Use of non-native species	Entanglement	Disturbance to wildlife (boat movements, ADs)	Displacement	Physical damage to seabed habitat	Pollution Risk (including ballast water)	Water quality changes- routine discharges	Disturbance to wildlife	Displacement	Physical damage to seabed habitat	Changes to sediment transport/ hydrography	Disturbance to wildlife (construction and operation)	Displacement	Collision risk- tidal	Collision risk- wind	Smothering- dredging/ trawling	Physical damage to seabed habitat	Removal of target/ non-target species	Entanglement/ by-catch	Smothering of seabed	Physical damage or removal of habitat	Removal of food supply	Changes to sediment transport	Disturbance to wildlife
Activity					Finfish Aquaculture							Challen A manufacture	Sileilisii Aquacuitale					Oil Developments					Renewable Energy					Commenced Picking	Commercial Fishing		Mineral Extraction	(sand, gravel & shingle,	including coastal	quarrying) and	dredging and disposal

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	target species	MOI			_		MOI			
_	Physical damage/ erosion	low	medium				100			•
(including angling) Dist	Disturbance to wildlife	low		high	high	medium		hìgh	high	high
llo	Collision risk from watercraft		:(*)	medium		wol		high	yBiy	high
Smc	Smothering of seabed	high	high		•	r	•	•	·	•
Construction: Shore Rem	Removal of food supply	low	medium	3	medium	1	•	20	æ	3
Access, Coastal defence Phy	Physical damage to seabed habitat	high	high	540	828	ř.		6	e	6
/ flood protection, Cha	Changes to sediment transport	high	high			1	low	*	*	٠
Cables & pipelines, Dist	Disturbance to wildlife (construction)	-		wol	high	wol		high	y liq	high
Moorings, Fixed links Disp	Displacement and/or collision risk (e.g. from	,		medium	medium	medium		medium	milpem	wol
brid	bridges)									
Wat	Water quality changes including anti-fouling	medium	medium	- 1	0.77	-	low	-	-	- 1
Transport	Disturbance to wildlife	*	*	low		wol		low	wol	medium
lloO	Collision risk	//#	19	low	low	low		low	wol	medium
Т	Physical damage	10	medium	200		Е	(40)	10	100	ŝ
	Removal of target/ non-target species		high		•	¥	*			
, calvi	Removal of food supply	(0)	low	1	low	ar.		4	C	
Dist	Disturbance to wildlife	r		medium	high			high	high	÷

Rating: Potential impact high/medium/ low where no rating is given the impact is considered to be very low or not applicable to the species/ habitat/ ecosystem

dependent of the time of year, scale and design of development. Some potential impacts may be mitigated against e.g. potential impacts on cetaceans can be reduced by the avoidance of acoustic deterrents. Many impacts may therefore be lower (although in some cases higher) than indicated. SNH, RSPB, SEPA or other relevant government body should be contacted for It is intended that this matrix is indicative only. All impacts considered are potential direct impacts, indirect and cumulative effects may also occur. The scale of actual impacts will be further information. A proposed development may need to consider impacts in more than one activity area, for example aquaculture, renewable and oil development ratings are for the sea development only and shore/ intertidal components such as shore access, cables and pipelines have been considered under 'construction'

Impact definitions

Smothering of seabed: through organic or inorganic material

Physical damage to seabed habitat: removal of habitat or substrate

Water quality changes: changes to water chemistry

Removal of plankton: excessive removal of plankton has the potential to cause ecosystem change

Removal of food supply: includes loss of sandeels and damage to shellfish beds
Use of non-native species: alterations to benthic habitats and ecosystems due to the

Displacement: restriction to movements in an area Collision risk: collision with water craft or moving structures

Entanglement: in nets and ropes e.g. anti-predator nets, fishing nets and creel lines Impact on or removal of target / non-target species: damage and removal

Escapees: the potential impacts on native stocks

and acoustic deterrents

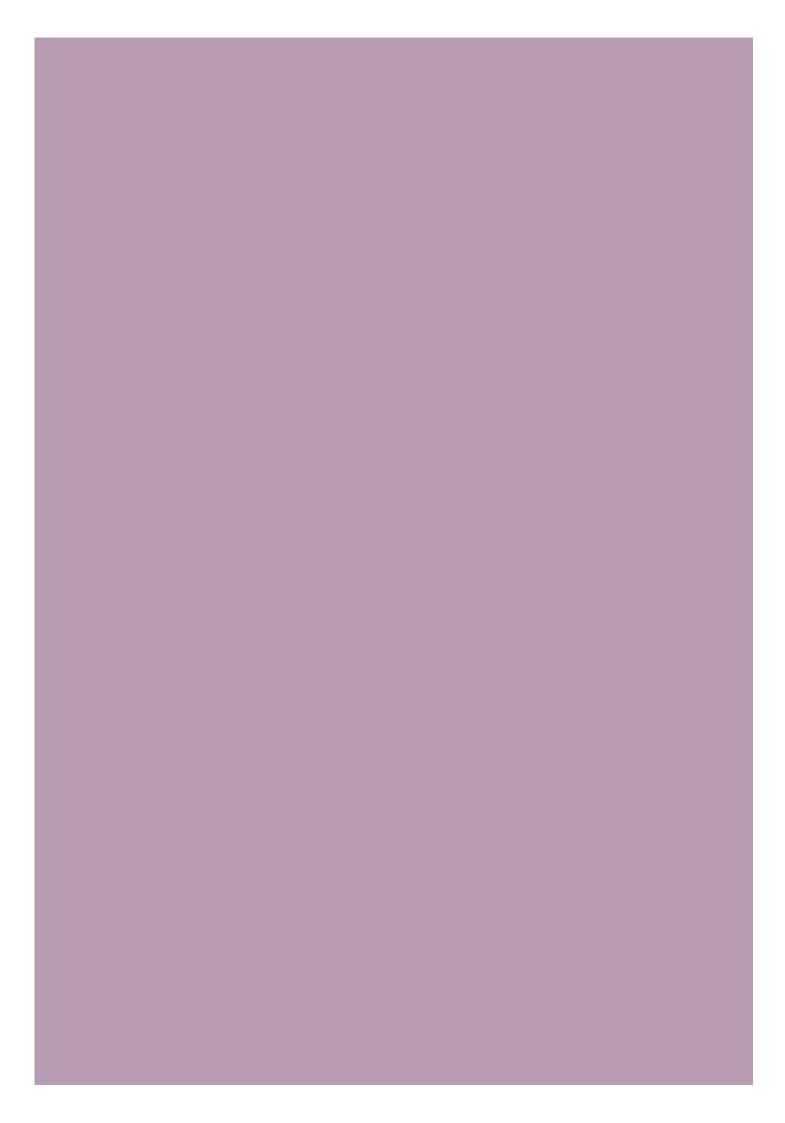
Disturbance to wildlife: the impacts of noise from human presence, boat movements

ntroduction of non-native species

* Eider ducks have traditional moulting sites, where for part of the year they are flightless and particularly vulnerable to disturbance. Development should be avoided at these traditional moult sites and moulting eiders should not be disturbed during July to September inclusive.

** Terns, oystercatchers and ringed plovers often nest near beaches and sometimes on breakwaters. Sea cliffs are often used by several species of nesting seabirds. Where these species are present, in order to avoid destruction or chilling of eggs and young, no works should be carried out and breeding birds should not be disturbed during April to August inclusive.

*** Common seals have traditional haul-out sites around the coast and on small islands. They breed during June and July and moult during August and September. Where common seals are present, in order to avoid disturbance, no works should be carried out and seals should not be disturbed during June to September inclusive





SSMEI Project Officer NAFC Marine Centre Port Arthur Scalloway Shetland Islands ZEI OUN

Telephone: (01595) 772332