

## GUIDELINE 6

# PARTNERS WILL ENCOURAGE WASTE MINIMISATION AND AN APPROACH TO WASTE MANAGEMENT WHICH TAKES ACCOUNT OF IMPACTS ON THE COASTAL AND MARINE ENVIRONMENT

### Background:

It is estimated that over 300,000 tonnes of household industrial and commercial waste arise and are disposed of around the Moray Firth. Less than 5% of waste leaves the area to be recycled and most of the remainder is disposed of through landfill. Some landfill sites are on the coast, including the major site at Longman Bay in Inverness, whilst others are a few miles inland.

### Key ways in which The Moray Firth Partnership can help include:

- providing a link between survey, clean-up, sources of litter and waste reduction;
- translating good practice throughout the Moray Firth area;
- helping to raise public awareness and involvement in waste management and minimisation.

### Key Issues and Opportunities include:

- raising awareness of the benefits of waste minimisation to address waste disposal and storage;
- promoting the waste management hierarchy amongst partners.

### Complementary initiatives include:

**National:** Scottish Natural Heritage (promotes clean beaches for amenity and wildlife), Scottish Environment Protection Agency (monitoring and National Waste Strategy), The Tourism & Environment Forum (Green Tourism Business scheme).

**Regional:** The Highland Council, The Moray Council, Aberdeenshire Council (integrated waste strategy development), Waste - Highland Action on Minimisation, North of Scotland Yachting Association (working with Department Of Transport and Maritime & Coastguard Agency), Highland Cycle Campaign (campaigning for modal transport shift), North of Scotland Water Authority (Think Before You Flush Campaign), Review of Local Authority Waste Disposal Strategies.

**Local:** Burghead Dive Club (underwater beach clean), Macduff Marine Aquarium (video presentation and planning 'Think Before You Flush' display), Moray Firth Wildlife Centre ('Keep the Firth Clean' campaign and beach watch surveys), Moray Firth Dolphin Trust (support educational workshops), Countryside Ranger Service, Talisman Energy (UK) Limited (waste management and monitoring procedures at Nigg), RAF Kinloss (waste management and audit system), Port Authorities (enforcing waste management facilities in accordance with regulations), Brora Harbour Users Association (pressures for collection/removal facilities), Friends of the Earth (Highland), Cromarty Community Council (litter bin survey).

NO	ACTION	1999/ 2000	2000/ 2001	2001/ 2002	2002/ 2003	LEAD BODY	CONTRIBUTORS	ROLE OF THE MFP SECRETARIAT
6.1	Undertake a public awareness campaign on the importance and best methods of sanitary waste disposal through drainage systems		✓			NoSWA	KHA, MC (TL), WHAM, GE, MMA, MFWC, MFDI, SEPA, SNH, HC (PS), INCC, EM, AC, KSB	
6.2	<b>Undertake a public awareness campaign about the effects and benefits of waste minimisation and raise awareness of existing initiatives</b>		✓	✓	✓	<b>KSB</b>	<b>HC (PS), WHAM, MC (PS), AC (EH), BIS, KHA, INCC, HIE, EM, MFWC, FoE, SEPA, SNH, Tai, RAF (K), KSB</b>	
6.3	Carry out a desk/field survey to identify marine litter issues and identify local problem areas			✓		<i>to be determined</i>	BDC, KHA, AC (EH), HC, MFWC, FoE, SEPA, SNH, KSB, WHAM	
6.4	Design and co-ordinate the implementation of an education and action programme to address marine litter problems				✓	<i>to be determined</i>	KHA, HC (PS), AC, MC, MFWC, FoE, KSB, WHAM	
6.5	Launch & operate 3 waste minimisation projects		✓	✓	✓	HC (PS), MC (TL), AC (EH)	KHA, INCC, HIE, Tai, RAF(K), SNH, SEPA, KSB, WHAM, TTEF	
6.6	Implement a consultation programme for the ultimate use of Longman landfill site when closed after 2003		✓			HC (PD)	HIE, BHUA, KSB	Help seek ideas for 'end use'
6.7	Launch public information and consultation campaign regarding future integrated waste management in the Highlands		✓			HC (PS)	HIE, KSB	Assist through dissemination of facts regarding sustainable recycling and composting
6.8	Run a seminar illustrating how business can save money through waste minimisation		✓			BIS	KSB	Part of a series of Best Practice seminars. Links to Partnership Project 4

## PARTNERS WILL PROMOTE MANAGEMENT THAT ENSURES THE HIGHEST POSSIBLE WATER AND AIR QUALITY OF THE FIRTH

### Background:

The maintenance of a high quality environment is essential to the health of both the people and wildlife of the Moray Firth. It is also fundamental to many industrial processes and economic activities. The relatively high environmental quality of the Moray Firth is locally valued as an important element of the high quality of life. Impacts on environmental quality range from those where little evidence of impact within the Firth has been identified to date (eg radioactive waste contamination, air pollution, ballast water, dredging and dumping) to those where an impact can be demonstrated (eg waste management, waste water discharges, land-use run off, nutrient enrichment and biotoxins).

### Key ways in which The Moray Firth Partnership can help include:

- encouraging better sharing of information;
- identifying and addressing issues with joint responsibilities;
- encouraging wide consultation on new waste schemes;
- encouraging and enabling public/user contribution to the waste management hierarchy.

### Key Issues and Opportunities include:

- wildlife disturbance and pollution from decommissioning activities;
- land use practices resulting in localised reduced water quality;
- nutrient enrichment and its effects upon human health and wildlife;
- inappropriate siting of marine fish cages which may have detrimental effects on the seabed, wild fish and water quality;
- the threat of small and large scale contamination from oil;
- over contamination in some areas by persistent substances such as toxic chemicals, anti-fouling compounds, pesticides and radionuclides;
- making water quality information more accessible to the public;
- contamination of water by pathogens, sewage solids, toxic compounds, human hormones and other chemicals in domestic and industrial discharges;
- reducing the potential impacts of ballast water discharge and the introduction of non-native species in the Firth;
- reduced air quality from a range of sources;
- underwater noise pollution and its impact upon marine mammals;
- the impact of dredging and dumping upon wildlife and water quality.

### Complementary initiatives include:

**National:** Scottish Environment Protection Agency (establishing partnerships between industry, regulators and Local Authorities to reduce emissions and contribute to UK Air Quality Strategy; consider noise when responding to consultations on underwater noise; monitoring and control of domestic and industrial discharges), Aberdeen University (current research on acoustic behaviour), Scottish Natural Heritage (advice on consultations; biotoxins - as it affects natural heritage interests; domestic and industrial discharges - as it relates to natural heritage), Alan Berry (biotoxins research), Fisheries Research Service (report on biotoxins in shellfish), Magellan Mussel Watch.

**Regional:** The Highland Council, The Moray Council, Aberdeenshire Council, Highland Cycle Campaign (campaigning to reduce car related pollution), North of Scotland Yachting Association, North of Scotland Yachting Association working with Maritime & Coastguard Agency.

**Local:** Talisman Energy (UK) Limited (monitoring at Nigg oil terminal; seismic surveys undertaken as part of oil and gas activity; discharge monitoring at Nigg oil terminal), RAF Kinloss (Environmental management and Audit system), Burghead Dive Club, Moray Firth Wildlife Centre (exhibition), Moray Firth Dolphin Trust, RAF (bombing ranges), Dolphin Space Programme and Dolphin Awareness Initiative, Inverness and Nairn Canoe Club (water quality).

NO	ACTION	1999/ 2000	2000/ 2001	2001/ 2002	2002/ 2003	LEAD BODY	CONTRIBUTORS	ROLE OF THE MFP SECRETARIAT
7.1	Undertake audit monitoring of at least 2 significant industrial air emissions in the Moray Firth			✓		SEPA	AC, (EH), Tal, SNH, RAF(K)	
7.2	Encourage 20% of partners to adopt an Environmental Management System (ISO 14001 or equivalent) including: (a) holding a conference on Environmental Management Systems (1999/2000)			✓		<i>to be determined</i> (a) BARMAC		
7.3	Set up systems to monitor & reduce emissions from port activities not covered by legislative control (pilot ports to be determined)		✓			<i>to be determined</i>	AC (EH), SEPA, HC (PS), Tal	
7.4	Review existing information on the impact of air quality on the marine environment and possible implications for the Moray Firth			✓		FRS	SEPA, AC	Possible student project
7.5	Identify ways in which communities and individuals could contribute to action that meets air quality targets			✓		HC (PS)	KHA, HCC, AC (EH), MC (TL),	Raise awareness of ways, once identified
7.6	Report findings of the Aberdeen Marine Laboratory's ballast water survey	✓	✓			FRS	Tal, CFLG, SNH, SEPA	Help publicise results of survey as appropriate
7.7	Assess the potential problem of ballast water discharge in the Moray Firth, determine the main sources of ballast water input into the Firth and review the facilities and treatment measures currently in place	✓	✓			MLA	Tal, CFLG, SNH, SEPA, AC	Assist by carrying out work through MFP student placement
7.8	Maintain a record of ballast operations occurring at ports in the Firth		✓	✓	✓	<i>to be determined</i>	FRS, Tal, CFLG, SNH	
7.9	Adopt the International Maritime Organisation guidelines on ballast water management procedures and investigate the use of bylaws to control ballast water discharge			✓		<i>to be determined</i>	FRS, Tal, CFLG, SNH, AC (EH)	
7.10	Raise awareness throughout a wide audience within the Moray Firth to the issue of ballast water discharges and the problems of non-native species		✓			FRS	CFLG, SNH	Article in 'Moray Firth Matters'
7.11	Set up a network of organisations and volunteers to monitor any occurrences of non-native species. This could expand the current 'Magellan Mussel Watch'			✓		SNH	BDC, FRS, EM, CFLG, SNH	Publicise network and identify possible contributors
7.12	Carry out a review of how other countries have addressed the question of non-native species and consider any lessons relevant for the Moray Firth. In particular the review will consider measures which have been used to prevent the introduction of non-natives and describe what control methods have been used to deal with them once established			✓		<i>to be determined</i>	FRS, Tal, CFLG, SNH	Possible student project
7.13	Where practicably possible, consider control measures for those native species which have already become established in the Moray Firth (eg spartina anglica)				✓	<i>to be determined</i>	FRS, CFLG, SEPA, SNH	

NO	ACTION	1999/ 2000	2000/ 2001	2001/ 2002	2002/ 2003	LEAD BODY	CONTRIBUTORS	ROLE OF THE MFP SECRETARIAT
7.14	Set up a working group to prepare working guidelines for environmental regulators, planners & protective services to ensure that marine noise is incorporated into decision making processes where appropriate legislation allows and identify gaps which place undue risk upon any species		✓			FRS	SEPA, SNH, AU (LFS), MFWC, Tal, MFDT	Will be taken forward through management arrangements for MF Marine cSAC link. Links to Partnership Project 3. Help set up initial meeting
7.15	<p>Working group (see 7.14) to:</p> <p>(a) debate whether or not seismic surveys (using currently available technology) should take place in those parts of the Firth with high densities of marine mammals;</p> <p>(b) investigate the impacts of military activities on marine mammals;</p> <p>(c) invite the Ministry of Defence to review its case for using live ammunition when bombing marine targets and assess scope for minimising other sources of noise;</p> <p>(d) debate the addition of 'pingers' to fishing equipment in the Moray Firth before calls to implement are made;</p> <p>(e) consider an awareness raising exercise for reducing the intensity of long-term noise by encouraging the fitting of quieter engines &amp; providing facilities to check for faulty, &amp; therefore noisy, gear boxes &amp; propellers. Develop a voluntary boat MOT;</p> <p>(f) review the use of seal scarers especially where fish farms are located at key areas for protected marine mammal species;</p> <p>(g) run an awareness raising initiative to encourage all users of the Firth to take appropriate measures to prevent or minimise noise likely to disturb others including recreational boat traffic;</p> <p>(h) set up long-term acoustic monitoring to evaluate sources of anthropogenic noise and cetacean disturbance.</p>		✓			FRS	AB, AC, SNH, AU (LFS)	<p>Issue will be taken forward within management arrangements for MF Marine cSAC which MFP is facilitating</p> <p>Links to Partnership Project 3</p>

NO	ACTION	1999/ 2000	2000/ 2001	2001/ 2002	2002/ 2003	LEAD BODY	CONTRIBUTORS	ROLE OF THE MFP SECRETARIAT
7.16	<p>Set up a working group to collate the existing information on, and consider what measures are necessary to improve, the marine science of the Firth, particularly hydrography, microecology and nutrient kinetics. Working group to consider:</p> <p>(a) encouraging the continuation and preferably consider increasing nutrient monitoring in the Firth;</p> <p>(b) identifying areas of localised nutrient enrichment and identify ways of reducing contributions from point and diffuse sources by discussing ways of limiting enrichment;</p> <p>(c) constructing a nutrient budget for the Firth;</p> <p>(d) prepare a report on harmful phytoplankton and biotoxins in coastal waters around the Moray Firth;</p> <p>(e) the possible location of a monitoring station in the Firth and discussing the parameters to be monitored. Identify equipment costs and possible funding sources.</p>			✓		<i>to be determined</i>	AC (EH), SEPA, HC (PS), Tal	Help set up initial meeting
7.17	Investigate possible links between illness in water users, seafood consumers, wildlife and the presence of biotoxins.			✓		<i>to be determined</i>	AB, BDC, INCC, FRS, SNH, HC (PS)	Help identify water users
7.18	Research into establishing the sustainability of projects involving water use, and the definition of 'acceptable impacts'			✓		<i>to be determined</i>	SEPA, AB, SNH	
7.19	Report on international developments in research in biotoxin production		✓			FRS	AB, SNH	
7.20	Collate the existing information on the marine science of the Moray Firth, particularly hydrography, microecology and nutrient kinetics.		✓			<i>to be determined</i>	AB, FRS, AC, SNH, SEPA	Possible student project
7.21	Investigate relative importance of natural and man-made sources of radioactivity in the aquatic environment of the Moray Firth		✓			SEPA	FRS, SNH	Help publicise results
7.22	Conduct research into effects of oestrogenic compounds on marine fauna			✓		<i>to be determined</i>	SEPA, FRS, SNH	
7.23	Investigate the potential health related effects on users of beaches which may be related to discharges		✓			<i>to be determined</i>	INCC, SNH, HC (PS)	
7.24	<b>Implement Improvement Plans for all identified waters (grades C and D)</b>		✓	✓		<b>SEPA</b>	<b>SNH</b>	
7.25	Prepare short explanatory notes on selected water quality subjects which are of interest to the public and decision makers		✓	✓	✓	SEPA		Help distribute information

## GUIDELINE 8

# PARTNERS WILL ENCOURAGE NEW DEVELOPMENT WHICH REQUIRES A COASTAL LOCATION TO LOCATE PRIMARILY WITHIN AREAS THAT HAVE ALREADY BEEN DEVELOPED

### Background:

Expansion and operation of a range of human development activities, such as industry, agriculture, forestry, coastal settlements, golf courses and communications infrastructure have an effect on coastal land, including the direct loss of coastal habitats. Around the shores of the Firth in particular, pressure to develop areas of intertidal land has increased in recent years. These developments can often generate heated debate and may polarise views about coastal management.

### Key ways in which The Moray Firth Partnership can help include:

- bringing interests together at an early stage;
- encouraging an holistic view of the coastal area.

### Key Issues and Opportunities include:

- impacts of coastal development on coastal habitats and species;
- impacts of coastal development on space for recreation and recreation activities;
- impacts of coastal development on land and seascape;
- progressing a locally agreed framework for future development;
- early consultation on new developments and designations.

### Complementary initiatives include:

**National:** NPPG 13 on coastal planning.

**Regional:** Development planning undertaken by The Highland Council, The Moray Council and Aberdeenshire Council, review of Local Authority waste disposal strategies.

**Local:** Community planning.



NO	ACTION	1999/ 2000	2000/ 2001	2001/ 2002	2002/ 2003	LEAD BODY	CONTRIBUTORS	ROLE OF THE MFP SECRETARIAT
8.1	Liaise with the Scottish Executive over further refinement of the definitions of the Scottish coastal divisions		✓			HC (PD), MC (EDP), AC (PD)	CFLG, SNH	
8.2	Evaluate the problems of the lack of planning control beyond the mean low water mark and clarify what role the MFP has in helping to resolve those issues. Liaise with the Scottish Coastal Forum			✓		HC (PD), MC (EDP), AC (PD)	CFLG, SNH	Help organise initial discussion meeting
8.3	Use reviews of statutory development plans at the regional and local levels to identify the potential for further coastal development, taking into account the need to safeguard areas of designated natural heritage importance		✓			HC (PD), MC (EDP), AC (PD)	CFLG, SNH, Tai	

## GUIDELINE 9

# PARTNERS WILL RECOGNISE THE NEED FOR DIVERSIFICATION IN THE FIRTH'S ECONOMY AND WILL RECOGNISE THE ENVIRONMENT AS A MAJOR ASSET TO HELP THIS PROCESS

### Background:

The coastline of the Moray Firth is an important focus for employment and industry. The inner Moray Firth acts as economic 'engine' for the rest of the Highlands. Economic activities that depend on the coast and sea include manufacturing and processing, shipping, port and harbour activities, oil, gas, transport and infrastructure (including road, rail and air). The challenges facing the area are recognised by its present European Union Status as Objective 1 and 5b (currently under review). There is a need to ensure that economic development takes place in a sustainable way, in terms of both the long term viability of the economy and also the environmental resources of the area.

### Key ways in which The Moray Firth Partnership can help include:

- bringing together commercial and environmental interests at an early stage;
- encouraging proactive discussion of mutually acceptable development proposals.

### Key Issues and Opportunities include:

- planning for the impact of changing population dynamics upon economic development and any subsequent training needs;
- future economic support for the area from Europe;
- considering the options for widening the future economic portfolio of the Moray Firth and the area's current dependence on speculative work such as oil and gas;
- the development of the University of the Highlands and Islands has the potential to enhance economic development in the Moray Firth;
- actual and perceived burdens of increasing environmental legislation amongst the client base;
- developing the oil and gas industry alongside the development of the most effective pollution contingency measures, including those that will be required for decommissioning work;
- exploring the potential for a growth business in industrial environmental protection;
- helping to avoid conflict and promote co-operation between different interests by discussing planning issues, development proposals and applications at an early stage.

### Complementary initiatives include:

**Regional:** Highlands & Islands Enterprise Network, The Highland Council, The Moray Council and Aberdeenshire Council.

**Local:** Local Rural Partnerships.



NO	ACTION	1999/ 2000	2000/ 2001	2001/ 2002	2002/ 2003	LEAD BODY	CONTRIBUTORS	ROLE OF THE MFP SECRETARIAT
9.1	Audit the potential economic benefits that the area's environmental and cultural assets could offer, including how designations could provide business incentives and exploring development opportunities dependant upon a high quality natural environment		✓			<i>to be determined</i>	KHA, MC (EDP), AC (PD), Re, RACE, SNH, MFWC, BDC, HS, SWT, HIE	Assist with seeking funding. Help to disseminate results
9.2	Undertake an economic appraisal of the Moray Firth including - changing population dynamics and implications, training needs and options for widening the future economic portfolio of the Firth			✓		<i>to be determined</i>	SNH, RACE, HC, HIE	
9.3	Hold a seminar to identify ways in which the actual and perceived burdens of environmental legislation amongst the client base could be reduced and stimulate follow up actions as appropriate				✓	<i>to be determined</i>	AC (PD), BIS, HS, HIE	
9.4	Explore the potential for growth business in industrial environmental protection			✓		<i>to be determined</i>	AC (PD), BIS, HIE	