



The use of  
voluntary  
management in the  
protection of UK  
marine biodiversity

**Investigating the use of voluntary marine management  
in the protection of UK marine biodiversity**

A Report for the Wales Environment Link (WEL) Marine Working Group

Dr Sian Prior

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*For more information about this report contact:*  
John Clark, RSPB Cymru, Cardiff, CF11 9AB  
[john.clark1@rspb.org.uk](mailto:john.clark1@rspb.org.uk)  
tel 029 20353000

## Executive summary

With work progressing on the identification of highly protected Marine Conservation Zones (MCZs) in Welsh territorial waters, and other Marine Protected Areas (MPAs) throughout UK seas, national administrations are considering options for the future management of new and existing sites. In a climate of reduced regulation and limited resources, the Wales Environment Link (WEL) Marine Working Group is concerned that the Welsh Government, and other administrations in the UK, may favour the use of voluntary management measures for site protection over statutory protection.

In order to inform discussions on the most appropriate and effective management for MPAs in the long term, this report uses a range of case studies and feedback from professional experience in Wales and across the UK, to identify lessons from the successes and challenges associated with voluntary management for marine sites.

The evidence collated enables conclusions on the efficacy of voluntary approaches to the management of MPAs in Wales, and how these may or may not contribute to achieving a UK wide ecologically coherent network of well managed MPAs, that deliver conservation objectives and reverse decline in our marine environment.

Key findings include:

- within the spectrum of voluntary to statutory approaches to site protection there is no single best response to marine site management that will fit all cases;
- voluntary initiatives driven by a statutory body in place of statutory management tools have generally not been successful, and conservation objectives have not been delivered;
- voluntary management is unlikely to be an appropriate approach to controlling damaging activities for sensitive features within highly protected MPAs;
- voluntary measures are not a quick fix solution, but can require considerable resources and a long-term commitment;
- even if a voluntary initiative is successful, the effort of reaching consensus might mean compromises on the conservation objectives;
- the failure of a voluntary approach could result in damage to the conservation interest of a site with no recourse to legal or enforcement action, and nothing to prevent it from happening again;

- the ineffectiveness of voluntary approaches has been a key driver for the introduction of many statutory approaches;
- statutory approaches can allow for the possibility of legal action to prevent a potentially damaging activity, or regulate potentially damaging activities;
- a statutory approach can introduce a system of licensing or permitting which can provide validity to stakeholders, be used to limit capacity of an activity and, in the event of serious or continuous non-compliance, be revoked.

Many of the case studies were obtained from MPAs in Welsh territorial waters, and provide a valuable insight into the range of voluntary approaches applied over the past thirty years, up to the present day. A clear theme from the investigation is that where voluntary approaches have been successful, this has occurred within small communities, or to address single, simple issues or “easy wins”. Conversely, statutory approaches are generally the preferred approach when significant economic activities need to be addressed, and in complex “hot spots” of activity where multi-activity management is necessary. Experience shows that the reliance on voluntary measures to deliver a high level of protection to vulnerable habitats and species is not appropriate, suggesting that a stronger statutory route would be the most suitable mechanism in the face of strong economic pressures.

Importantly, successful voluntary approaches do not result from a top-down process – evidence is clear that the success of voluntary management in small communities is due to a bottom-up approach, initiated by community members, with local leadership and broad community support in the absence of a statutory framework. This has occurred not as a result of Government initiation, but through community action.

Wales Environment Link (WEL) is a network of environmental and countryside Non-Governmental Organisations in Wales, most of whom have an all-Wales remit. WEL is officially designated the intermediary body between the government and the environmental NGO sector in Wales. Members of WEL's Marine Working Group include the Marine Conservation Society, National Trust, RSPB Cymru, Wildlife Trusts Wales and WWF Cymru.

For more information on the WEL Marine Working Group visit [www.waleslinkmarine.org.uk](http://www.waleslinkmarine.org.uk)

Wales Environment Link  
27 Pier Street, Aberystwyth SY23 2LN

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## Glossary

CBD	Convention on Biological Diversity
CCW	Countryside Council for Wales
COAST	Community of Arran Seabed Trust
Defra	Department for the Environment, Fisheries & Rural Affairs
EMS	European Marine Site
EU	European Union
MCZ	Marine Conservation Zone
MMO	Marine Management Organisation
MNR	Marine Nature Reserve
MPA	Marine Protected Area
NCC	Nature Conservancy Council
NTZ	No Take Zone
OECD	Organisation for Economic Co-operation and Development
OSPAR	Oslo and Paris Convention for the protection of the maritime environment of the north-east Atlantic
PCNPA	Pembrokeshire Coast National Park Authority
PMC	Pembrokeshire Marine Code
RSPB	Royal Society for the Protection of Birds
SAC	Special Area of Conservation (EU Habitats and Species Directive)
SFC	Sea Fisheries Committee
SPA	Special Protection Area (EU Birds Directive)
UK	United Kingdom
UNEP	United Nations Environment Programme
VMCA	Voluntary Marine Conservation Area
VMR	Voluntary Marine Reserve
WEL	Wales Environment Link
WiSe	WiSe Scheme – the UK standard for commercial marine wildlife watching
WSSD	World Summit for Sustainable Development

## 1. Rationale

As the Welsh Government and other national administrations consider options for the future management of Marine Protected Areas (MPAs), the WEL Marine Working Group is concerned that a lack of funding and / or resources might lead to a presumption in favour of the use of voluntary management measures for site protection over statutory protection. Voluntary measures are frequently seen as the cheap and easy option for site management, which could lead to an over dependence on their use in the delivery of site management. WEL's concern at the potential widespread use of a voluntary approach to management stems from the view that voluntary management measures do not always have the best track record of delivering MPA conservation objectives, and can lead to sites being damaged. This creates additional work (thus requiring additional resources) for the statutory agencies whose responsibility it is to monitor sites and intervene when activities threaten a site. This is particularly relevant for highly protected<sup>1</sup> MCZs under proposal in Welsh waters, for which voluntary measures are highly unlikely to be an appropriate management option.

To support the view that voluntary measures will not always be appropriate for MPA management, this report reviews, collates and summarises information and examples on the challenges associated with voluntary management for marine sites. It is largely based on the feedback and case studies provided by a range of professional experience around the UK. The report draws out lessons from voluntary approaches that have been successful and from those that have failed to deliver the anticipated conservation objectives, and formulates conclusions about how voluntary approaches could be best used in the future management of an ecologically coherent UK-wide network of MPAs.

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<sup>1</sup> In Wales, highly protected MCZs are sites where extractive and depositional activity will not be permitted. Other activities might also not be permitted if they could be damaging or disturbing; this will depend on the appropriate conservation objectives determined for the individual sites.



## 2. A brief history

The United Kingdom has long supported the development and designation of networks of marine protected areas (MPAs), to conserve biodiversity and contribute to the sustainable management of the marine environment. This has been through international commitments such as the World Summit on Sustainable Development (WSSD), the Convention on Biological Diversity<sup>2</sup> (CBD) and under the OSPAR Convention<sup>3</sup>. The OSPAR commitment to the designation of an ecologically coherent network of marine protected areas (MPAs) by 2012 and the WSSD 2012 deadline are both approaching rapidly.

The UK's interest and effort in designating MPAs predates the WSSD, CBD and OSPAR commitments, and for over three decades the value of marine protected areas has been recognised. The historical absence of a useable statutory mechanism for designating important marine waters, identified because of their natural diversity or prolific natural resources, led to the development of several voluntary, largely community-driven initiatives in the 1970's and 80's, which included Skomer Voluntary Marine Reserve (VMR), Lundy VMR and Helford Voluntary Marine Conservation Area (VMCA).

In the 1980s, for the first time in UK waters, the Wildlife & Countryside Act 1981 included provisions for the designation of the statutory marine protected areas – Marine Nature Reserves (MNRs). However, despite considerable interest in the use of the Wildlife & Countryside Act provisions to provide marine protection only three sites were ever designated – Lundy MNR, Skomer MNR, and Strangford Lough MNR. The difficulties experienced in seeking consensus on the designation of further MNRs led to continued efforts in developing voluntary initiatives in the 1980s and 1990s, for example, Wembury VMCA, Polzeath VMCA, and St Abbs & Eyemouth VMR. These voluntary initiatives covered a range of different approaches, some with a broad focus on protection and recognition of the site as a whole, and others focusing instead on the voluntary management of specific activities within the site, such as boat operations in Cardigan Bay and scallop dredging in Lyme Bay.

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<sup>2</sup> In 2002, the World Summit for Sustainable Development (WSSD) agreed to establish representative networks of MPAs by 2012. The Convention on Biological Diversity (CBD) identified MPAs and networks of MPAs as key instruments to achieve the WSSD target to significantly reduce the loss of biodiversity by 2010 and furthermore recommended that 10% of all marine and coastal ecological regions be conserved by 2020.

<sup>3</sup> In 2003, the governments of the North-East Atlantic agreed under the Oslo and Paris (OSPAR) Convention on the protection of the maritime environment of the North-East Atlantic to establish an ecologically coherent network of well-managed marine protected areas throughout the North-East Atlantic by 2010. At the 2010 Ministerial Meeting of the OSPAR countries, it was recognised that this aim had not been achieved, and a new target of completing the network by 2012 was set.

The UK was also required by the European Nature Directives to establish protected areas for sites of international (European) importance for wildlife. In 1992, the EU Habitats and Species Directive<sup>4</sup> was adopted – requiring new regulations be adopted and applied to protect specific marine habitats and wildlife identified in Annexes to the Directive. In addition, the EU Birds Directive<sup>5</sup> (dating originally from 1979) was also being applied to coastal and inter-tidal areas, to contribute to protection for seabirds breeding on coastal cliffs and islands, and waders and wildfowl feeding in intertidal areas. Together the marine SACs (under the EU Habitats Directive) and coastal and marine SPAs (under the EU Birds Directive) contribute to the EU’s “Natura 2000” network – an EU wide network of protected areas. These sites are also referred to as European Marine Sites (EMS).

During the 1990s and 2000s, marine SACs and SPAs were identified and designated to meet the requirements of the EU Directives and create a network of marine protected areas across European waters. Marine SACs and SPAs are identified on the basis that these are the “crème de la crème” of sites for the habitats and wildlife specified in the Directives, so inevitably there is overlap with a number of previously identified sites, including both MNRs and VMCAAs – thus providing an additional layer of statutory protection for these sites. This additional protection was largely welcomed, but in a few instances the statutory designation of these sites was seen as being a very top-down and heavy-handed approach. Despite the statutory protection provided by SAC and SPA designation, a mixture of statutory and voluntary measures have been used to regulate specific activities within SACs – often voluntary approaches have been followed by statutory measures when the former failed to deliver the required conservation objectives, for example see the Portsmouth Harbour, Burry Inlet, and Tremadog Bay case studies in the report below.

In the late 1990s – early 2000s it was gradually recognised that the protection for marine habitats and wildlife offered by the Habitats and Birds Directives was not comprehensive, and that these regulations were insufficient, on their own, to deliver an ecologically coherent and comprehensive network of marine protected areas in UK waters.

To give effect to international commitments to develop an ecologically coherent network of MPAs, new marine legislation, which includes provisions for the designation and management of MPAs in both inshore and offshore waters, has been adopted<sup>6</sup>, and the

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<sup>4</sup> Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora.

<sup>5</sup> Council Directive 09/147/EC of 30 November 2009 on the conservation of wild birds / Council Directive 79/409/EEC of 2 April 1979 on the conservation of wild birds.

<sup>6</sup> The UK Marine and Coastal Access Act (2009) requires the designation of marine conservation zones (MCZs) and the Marine (Scotland) Act, 2010 requires the designation of Scottish MPAs. Note: Northern Ireland has still to introduce regulations which will allow the designation of marine protected areas in its waters.

process of identifying potential sites in England, Wales and Scotland, for inclusion in the UK ecologically coherent network, has been underway since 2010. The intention is for these sites to be consulted on during 2012, and (mainly) designated by the end of 2012.

In addition to developing an ecologically coherent network of MPAs, the OSPAR commitment also requires the sites contributing to the network to be “well-managed” with management measures put into place by 2016 at the latest<sup>7</sup>. As the designation processes in the UK make progress, the future management of the sites is also starting to be considered.

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<sup>7</sup> OSPAR Recommendation 2010/2 on amending Recommendation 2003/3 on a network of Marine Protected Areas

### 3. Voluntary approaches to environmental management

There is limited published literature on the value and benefits or failures of voluntary approaches for environmental management, however, this brief review considers a few relevant pieces of literature from which some lessons are apparent. A recently published UNEP report<sup>8</sup> on Governing Marine Protected Areas, analyses 20 MPA case studies ranging from examples with a strong legal basis, through community-driven or decentralised governance arrangements to examples with very limited or no governance. The study “deconstructs” the governance measures in place and identifies five categories of incentives which support three governance modes (top-down / state driven, bottom-up / community driven, market-driven governance):

- legal incentives (top-down governance),
- participative incentives (or bottom-up governance),
- economic incentives (market-driven governance),
- interpretative incentives (which can support all 3 governance approaches), and
- knowledge incentives (which can support all 3 governance approaches).

The analysis of the case studies showed that for a high level of effectiveness to be achieved in meeting MPA objectives, different categories of incentive should be used in a “balanced and mutually supportive way”. A key finding of the work is the fact that while economic, interpretative, knowledge and participative incentives can complement the role of legal incentives they cannot replace legal incentives, which are necessary to ensure that the effects of external driving forces can be withstood. It cautions that a move to decentralised and community-based approaches could undermine the potential for use of legal approaches and the political will for effective enforcement which are identified as essential in ensuring the success of decentralised and community-based approaches. However, it also recognises that without community stewardship or ownership, generating support from local stakeholders is less likely to be successful. Of the case studies included in the study, those without effective governance systems in place scored lowest in terms of effectiveness in meeting the MPA objectives.

The authors argue that the governance of MPAs should be considered in terms of how the incentives can be combined to give the most effective governance result, rather than a choice being made between the different categories. It is argued that in combining incentives from the different categories the interface between them can become blurred,

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<sup>8</sup> Jones, PJS, Qiu W, and De Santo EM (2011): Governing Marine Protected Areas – Getting the Balance Right. Technical Report, United National Environment Programme.

and suggests that the most resilient, equitable, and effective approach to MPA governance is provided through a combination of integrated approaches which has been able to co-evolve. The work concludes that it is the combined use of a diversity of interconnected approaches that will ensure that a governance framework is more resilient, but without strong legal incentives it will be inherently unstable, particularly in the face of external pressures.

Looking more widely, the value and success or otherwise of voluntary approaches used in other areas of environmental management has been examined in an Organisation for Economic Co-Operation and Development (OECD) Report<sup>9</sup> published in 2002. The report considers the use of voluntary approaches for environmental policy and recognises that while there can be some benefits in terms of low costs and flexibility, voluntary approaches run the risk of not achieving anything that would not have been achieved anyway, and administrative and abatement costs can be greater than using other instruments. However, the report does recognise the potential benefit of voluntary approaches that can require less preparation to put in place than mandatory approaches, and as a result a problem can begin to be tackled more quickly. In addition, the report suggests that combining voluntary approaches with other systems such as tax or tradable permit systems can undermine the environmental integrity of such instrument(s). The conclusions from the report include:

- although the environmental targets of voluntary approaches are often met, there seem to be few cases where the voluntary approaches have delivered more than would have happened anyway, and as a result the environmental effectiveness of voluntary approaches is questionable;
- the economic efficiency of voluntary approaches is generally low;
- voluntary approaches can be put in place more rapidly than new instruments or economic incentives, but there is little likelihood of such approaches delivering environmental improvements beyond business as usual;
- administrative and transaction costs can vary greatly between different voluntary approaches, but if too few resources are used during preparation, negotiation and enforcement, the environmental impacts are likely to be very modest;
- the performance of many voluntary approaches would be improved if there was a real threat of other instruments being used if targets are not met.

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<sup>9</sup> Voluntary Approaches for Environmental Policy. Effectiveness, Efficiency and Usage in Policy Mixes. OECD 2003. ISBN 92-64-10177-2.

A research report on Improving Business Environmental Performance: Corporate Incentives and Drivers in Decision Making<sup>10</sup> found that while the evidence base was patchy, most voluntary approaches in the context of improving company environmental performance were effective – but needed to be developed along with a combination of negotiated targets and regulatory threat. It also noted, however that there was little empirical evidence of the effectiveness of such approaches and that further research was needed. The need to standardise monitoring and assessment and build these into voluntary approaches in order to allow full assessment and improve comparison between approaches was also recognised.

Returning to voluntary approaches used to manage the marine environment, Salm and Clark in considering the institutional and legal framework for MPAs, note that some MPAs have been established using voluntary approaches in the past, but consider that:

“By definition, the designation of an area as an MPA will restrict activities, which will ultimately call for some degree of enforcement and such measures are impossible in the absence of a legal text that recognizes the authority vested in the managers of the MPA.”<sup>11</sup>

Roberts and Hawkins<sup>12</sup> in considering the fundamental requirements of marine reserves recognise that they often benefit from having a legal basis, although MPAs with strong community support can function without a legal basis but are vulnerable to loss of protection. They cite the voluntary approaches to marine reserves in the UK established by local supporters, recognising the limitations of any real protection to the marine life within them. Certainly there are a number of examples of voluntary initiatives in the UK where experience has demonstrated that voluntary approaches have limited if any success, see for example a number of the case studies in this report including St Agnes, Burry Inlet, Lyme Bay, Portsmouth Harbour, Tremadog Bay, and others. However, not all voluntary approaches have failed and some demonstrate varying degrees of success, see as examples the case studies from Helford voluntary marine conservation area, St. Abbs & Eyemouth voluntary marine reserve, and Lamlash Bay – a voluntary initiative from which a statutory measure resulted, and others. This report includes 14 case studies and important lessons can be drawn from all of them.

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<sup>10</sup> Webb, B., Chilvers, J. and Keeble, J., 2006. Improving Business Environmental Performance: Corporate Incentives and Drivers in Decision Making. A report to the Department for Environment, Food and Rural Affairs by Arthur D Little Ltd. Defra, London.

<sup>11</sup> R.V. Salm, John Clark, and Erkki Siirila (2000). Marine and Coastal Protected Areas: A guide for planners and managers. IUCN. Washington DC. Xxi+371pp.

<sup>12</sup> Roberts, C.M. and J.P. Hawkins, 2000. Fully-protected marine reserves: a guide. WWF Endangered Sea Campaign, 1250 24<sup>th</sup> Street, NW Washington, DC 20037, USA and Environment Department, University of York, York, YO10 5DD, UK.

## **4. Voluntary approaches to marine site management in the UK**

### **4.1 Collation of information**

Much of the information contained in Section 4 has been provided by local stakeholders with hands-on professional or voluntary experience of working on marine site management or other voluntary approaches. It contains valuable gems of information and lessons which can be distilled based on the reality of working with voluntary approaches in the marine environment. To assist the collation of information on the successes and failures of voluntary approaches, a questionnaire (see Annex I) was prepared and circulated to colleagues with professional and voluntary experience of working on marine site management. In a number of cases the questionnaire was circulated further to individuals likely to have an interest. Information was sought on voluntary initiatives that have been undertaken in the UK, and also on the personal perspectives of individuals on the successes, failures and challenges associated with voluntary approaches.

It is recognised that inevitably such an approach will only provide a partial picture of views on voluntary approaches and on the factors behind the successes, failures and challenges experienced, and this report does not attempt to provide a comprehensive analysis of all voluntary initiatives used in the UK. However, the author is confident that the majority of issues associated with the use of voluntary management measures to protect MPAs have been identified and drawn out through the approach adopted. With each case study included, the number of new issues identified decreased, to the point where additional analysis of further case studies seemed likely to provide relatively little further insight. The report includes a number of case studies which are considered examples of successful voluntary approaches, as well as some that have clearly not achieved the desired objectives. It does not concentrate on detailed assessment of the individual initiatives or approaches, but instead on identifying factors that contributed to each outcome, and lessons that can be drawn from the experiences. A summary of the case studies and where discussion can be found within the report is included in Table 1.

Twenty individuals contributed material: including twelve questionnaire responses and additional information on a total of sixteen sites (of which fourteen are included in this report), which was supplemented with reports and web-accessed materials such as copies of byelaws, notes of meetings and monitoring reports.

The majority, but not all, of those that returned questionnaires or provided information on specific examples come from either a statutory or non-governmental conservation background. Many had direct practical experience of managing sites or the wider marine environment using voluntary approaches, although a few were involved in seeking improvements to statutory management through the use of voluntary approaches, but

were not directly responsible for the management of the site themselves, and a few drew on the experience of voluntary initiatives rather than site based management measures.

## 4.2 Case studies

Eight case studies are presented here in detail, focusing on:

- Cardigan Bay in west Wales, a voluntary initiative which led to the development of a successful Code of Conduct, but was unable to address threats from outside of the area until it was overtaken by a statutory approach;
- Helford Voluntary Marine Conservation Area (VMCA), a successful community-led voluntary initiative in south-west England;
- Lamlash Bay in west Scotland, a voluntary initiative which has led to the designation of a statutory no-take zone;
- the waters of Lyme Bay, off the south-west English coast, where voluntary agreements were developed with local scallop dredgers to protect important reef communities, but a statutory ban was introduced following failure of the voluntary approach;
- the Pembrokeshire Coast in west Wales, which is a statutory marine SAC utilising voluntary approaches to management of some activities;
- the waters around Skomer Island, west Wales which started as a voluntary initiative but progressed to a statutory approach still utilising voluntary management approaches alongside some statutory based approaches;
- St Abbs & Eyemouth, a successful Voluntary Marine Reserve (VMR) on the south-east coast of Scotland which has experienced difficulties in addressing some aspects of management; and
- St Agnes in south-west England, featuring a small-scale voluntary No Take Zone (NTZ) which was not successful, within a VMCA.

These are followed by three cases studies focusing on voluntary agreements with fishermen within statutory protected areas – the Burry Inlet, Portsmouth Harbour and Tremadog Bay, and finally three brief examples of voluntary site protection initiatives from which further valuable lessons can be identified – Bembridge Ledges, Lundy, and Wembury VMCA.



**Map 1: location of case studies**



**Table 1: Summary of case studies**

<b>Initiative</b>	<b>Type</b>	<b>Date</b>	<b>Target activity</b>	<b>Refer to page</b>
Bembridge Ledges	proposal for voluntary conservation area	mid-80s	site protection	31
Burry Inlet	voluntary agreement (within a SAC)	2010	cockle fishing	29
Cardigan Bay	voluntary initiative including a code of conduct (subsequently within a SAC)	1990s – present (for Code of Conduct)	boat operations (for Code of Conduct)	17
Helford VMCA	voluntary marine conservation area (within a SAC)	80s - present	site protection	18
Lamlash Bay	voluntary initiative leading to statutory no take zone	late 90s - present	site protection and fisheries	19
Lundy	voluntary marine reserve – leading to statutory protection	70s / 80s - present	site protection / diving / fisheries	31
Lyme Bay	voluntary agreement (now within a SAC)	early 90s - 2006	scallop dredging	21
Pembrokeshire Coast	code of conduct (within a SAC)	2000s - present	commercial boat operators / divers / jet skis / kayakers	22
Portsmouth Harbour	voluntary agreement within a SAC / SPA	2009	clam dredging	29
Skomer	voluntary marine reserve – leading to statutory protection (using voluntary approaches)	Mid 70s - present	range of activities	24
St. Abbs & Eyemouth	voluntary marine reserve	'84 – present	shellfish collection / diving	26

St Agnes	voluntary no take zone	late 90s – 2003	shellfish potting	28
Tremadog Bay	voluntary agreement within a SAC	2005	scallop dredging	30
Wembury VMCA	voluntary marine conservation area (within a SAC)	90s - present	site protection	32

### Case Study 1: Cardigan Bay

The Cardigan Bay Marine Heritage Coast was a community-led initiative to extend the Heritage Coast designation offshore to provide protection for the local populations of bottlenose dolphins and seals. The initiative included the development of a Code of Conduct with local commercial boat operators with the aim of reducing disturbance to the marine mammals from recreational boat traffic. Monitoring of compliance with the Code of Conduct shows that the overall level of compliance remains good at 87% of nearly 400 encounters observed in 2009<sup>13</sup>, particularly in areas where there was most initial support from the local community and boat owners. On occasions when the Code is breached, there is however no possible course of action for enforcement.

The original Marine Heritage Coast initiative was largely dependent on key individuals and when these people moved away from the area, there was a weaker focus on the initiative as the sole driver in delivering conservation, and management of the Code of Conduct was eventually overtaken by the statutory SAC designation. This highlights that, while voluntary approaches can work to address local issues particularly when there is strong community support, there is a risk that local leaders may move on or local opinions may change over time, leading to a threat to the continuation of the voluntary initiative. The original Cardigan Bay initiative is thought to have been too dependent on too few individuals, which meant that it was weakened when those key individuals ceased their involvement (e.g. by moving away), and budgets became limited.

While the voluntary approach has worked to address one threat (disturbance by recreational boat traffic), it was unable to simultaneously tackle other issues also considered critical to the protection of the dolphin population, such as scallop dredging and oil & gas exploration. These were only able to be addressed once the area received statutory designation as a

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<sup>13</sup> Allan, L., M.Green & J.Kelsall, 2009. Bottlenose dolphins & boat traffic on the Ceredigion Coast, West Wales 2008 & 2009. Produced by Department of Environmental Services and Housing, Cyngor Sir Ceredigion County Council.

marine SAC. When the national government then tried to make available areas within the SAC for oil & gas exploration, the local environmental groups were able to lobby for an Appropriate Assessment of the potential oil & gas exploration within the site to be undertaken, as the site was protected by law. The Appropriate Assessment subsequently found that the protection of the dolphins for which the SAC was designated could not be guaranteed if the oil & gas exploration were to go ahead, and the areas were therefore withdrawn from licensing.

This is a clear example of where the voluntary approach alone was unable to tackle the complexity of issues that needed to be addressed for one site. It is also an example of how it can be difficult for local stakeholders to have access to, and undertake advocacy and outreach to, non-local stakeholders (in support of voluntary management approaches). Although statutory approaches can also struggle with the complexity of interests wanting to access a protected site, it is at least possible for enforcement action to be taken by conservation authorities, or for legal action to be considered by other interests.

## Case study 2: Helford Voluntary Marine Conservation Area

Helford Voluntary Marine Conservation Area (VMCA) is a local community driven voluntary site management initiative that started in the mid-1980s. The VMCA continues over 25 years on, and is now within the geographically broader statutory Fal and Helford marine SAC. Initially there was local antagonism to the VMCA from some

sectors, but this was overcome through the preparation of a coherent and robust set of baseline information on the site, covering both biological and social factors from earlier eras to the current time, and a dogged determination to reconcile inevitable differences of opinion. The initiative benefitted greatly from the strong, patient leadership of a respected

Map 2: Helford VMCA boundary (light green)



pillar of the local community, coherent and transparent governance and the commitment and dedication of the local members.

Other factors that contributed to the success of the initiative included broad public support – the initiative was not restricted to a few people with narrow sectoral interests, and to the land and sea based approach recognising the interaction between terrestrial and marine issues, activities and planning. It also proved beneficial to have the local major landowners involved.

Conservation successes at the Helford VMCA include: securing voluntary no anchoring areas on some of the most important eelgrass beds, celebrating the traditional activity of benign triggering (community cockling), and coordinating resistance to damaging commercial bait digging. Some of the gains are only emerging twenty-five years on.

It took a decade of patience and confidence-building to get the VMCA firmly established and when the SAC was introduced there was a concern that the successful voluntary approach was being usurped by a “stick wielding” regulatory approach, however the VMCA initiative continues today. As statutory bodies often lack the necessary resources to address compliance, local self-policing can also be a benefit, however financial support is required to make any initiative viable in the long-term and to keep people motivated, and financial support for the Helford VMCA was, and remains, a challenge.

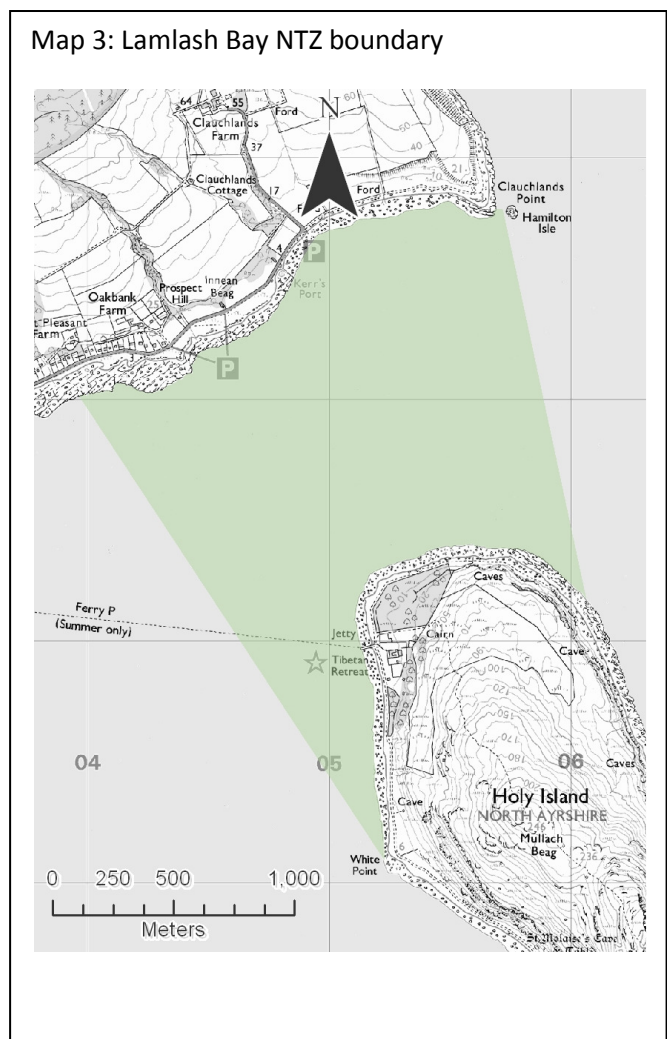
### **Case Study 3: Community of Arran Seabed Trust (COAST) – a voluntary initiative that has resulted in a statutory no take zone**

The Community of Arran Seabed Trust (COAST) is a community stakeholder organisation which was started over 12 years ago. The group was initiated by divers concerned at the destruction of the seabed and loss of biodiversity, particularly white fish stocks, in Lamlash Bay on the Isle of Arran, as a result of bottom trawling and dredging. A famous international sea angling festival which took place annually in Lamlash Bay was abandoned in the early 1990s as there was nothing left to fish. Following years of engagement and negotiation COAST successfully lobbied for the introduction of a statutory no take zone (NTZ) at the north end of the Bay in October 2008. Within two years research has shown that the protection for the site is already providing conservation and potentially longer term economic benefits. It is hoped that some form of marine protected area will still be achieved for the whole of Lamlash Bay – either as a community reserve and / or a Scottish MPA under the Marine (Scotland) Act 2010.

Although the NTZ is a statutory measure, problems still exist with enforcement which is, to some extent, dependent on the voluntary activities of local residents who are prepared to keep an eye on incursions into the NTZ. The primary problems with enforcement appear to be the limited resources of the enforcement body and difficulties in proving that fishing activity took place within the NTZ.

The success of achieving the NTZ is attributed to the resolve, resilience and commitment of the local community, along with the willingness of individuals to contribute considerable amounts of unpaid time to the effort. Extensive and frequent dialogue between the relevant bodies is also identified as being absolutely essential for success. The difficulties experienced include the lack of political will and political leadership, short-term economic pressures, fear of change, plus a lack of knowledge and understanding about what is happening beneath the waves. Once the site was designated, compliance became an additional difficulty, along with insufficient penalties for infringements, and insufficient rules. There is, for example, nothing in the regulation on the need for gear to be stowed while in the NTZ nor on obscuring the vessels name and number while in the NTZ. Economic pressure as a result of market demand is also a factor.

The experience of Lamlash Bay demonstrates that community-driven approaches can accomplish much for conservation. However there are some serious limitations, for example, when vessels arrived from further afield (Ireland, Northern Ireland, Isle of Man or other parts of Scotland) to exploit the resources it was difficult for the local community representatives to engage with these stakeholders. A major benefit of the statutory approach is the existence of “teeth” to enforce the measure, although enforcement is still difficult, and resources are fundamental to its success.



#### **Case Study 4: Lyme Bay – voluntary agreements fail to protect nature conservation interest**

In the early 1990s, following survey work by Devon Wildlife Trust in Lyme Bay, a recommendation was made that seven reef systems in the eastern part of Lyme Bay should be included within a Voluntary Marine Conservation Area (VMCA) and Codes of Conduct should be developed to control activities that would further damage the reefs<sup>14</sup>. It was already considered that a further reef system in the eastern part of the Bay had been destroyed by fishing activity. At the time there seemed to be no other way in which these important habitats could be protected from damaging activities. This recommendation from the early 1990s is now considered irrelevant, in part because options are now available for statutory protection that did not exist 20 years ago, but not least because it is considered that voluntary agreements have been found to be “worthless in the face of economic pressure”.

Further survey work in the late 1990s supported subsequent discussions on the management of the area and helped to inform the development of a voluntary agreement in 2001 between local fishermen and Devon Wildlife Trust which excluded scallop dredging from the area around two of the reefs. In the winter of 2005 / 06, Devon Wildlife Trust began to receive reports of substantially increased scallop dredging activity in Lyme Bay, including a significant increase in the numbers of vessels operating in the area and fishing activity with the voluntary closed areas - the initial voluntary agreements with the local fishermen were being ignored.

Statutory regulation to limit fishing activity in the most sensitive areas was then pursued. In August 2006, the then Fisheries Minister announced that he had instead reached a second voluntary agreement with the local scallop dredging association to close four of the reefs totalling 12 sq. miles of seabed. This however was only a fraction (20%) of the area that the nature conservation agency had recommended for closure to secure long-term viability of the Lyme Bay reef system. Subsequently in July 2008, Defra introduced a statutory order<sup>15</sup> closing a 60nm<sup>2</sup> area to scallop dredging and bottom trawling to allow recovery of the reefs biodiversity. Other forms of fishing, diving and other recreational activities are still allowed to take place. Then in August 2010, the area was protected as a SAC because of the importance of the reefs for conservation.

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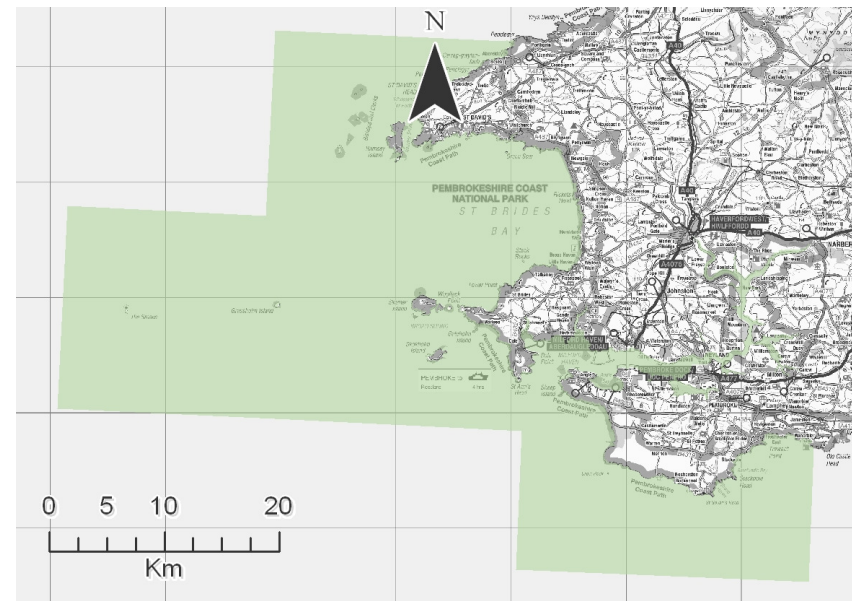
<sup>14</sup> Lyme Bay Reefs. A 16 year search for sustainability. Devon Wildlife Trust, October 2007.

<sup>15</sup> The Lyme Bay Designated Area (Fishing Restrictions) Order 2008.

## Case Study 5: Pembrokeshire Marine Code – a voluntary initiative within a marine SAC

The waters around the Pembrokeshire coast have received statutory designation as a marine SAC for a range of habitats and wildlife, and through a number of SPAs which have a terrestrial or intertidal element to protect bird populations, including Grassholm Island, Skokholm and Skomer, and Ramsey and St David's Peninsula Coast. To protect marine wildlife along the

Map 4: Pembrokeshire Marine SAC \*



*\*the PMC extends beyond the SAC boundary*

Pembrokeshire coast from disturbance from marine leisure and commercial wildlife watching trips, a voluntary agreement for boat operators – the Pembrokeshire Marine Code (PMC) has been developed. Disturbance from kayaking has also been a concern, and a dedicated voluntary kayakers' code has helped to improve the situation in recent years.

The initiative to develop and manage the PMC is administered by a Project Officer under the umbrella of the Pembrokeshire Coastal Forum – a non-statutory organisation that does not take a stance but facilitates stakeholder engagement. The Code of Conduct has been in effect since 2002, and until mid 2011 all local boat operators were signed up to it. It was anticipated that the voluntary Code, which had input from local wildlife tour boat operations, diving organisations, jet ski organisations, sailors and kayakers, would encourage ownership and responsibility for actions in a sensitive area. The Pembrokeshire Coast National Park Authority (PCNPA) were supportive of the scheme, and in 2009 it was agreed at senior management level that commercial wildlife watching, recreational diving, and sea kayaking operators, must be signed up to the PMC scheme in order to advertise in the PCNPA visitor centres and marketing publications.

The development of the Code by boat skippers and conservationists has resulted in a majority consensus on access restrictions with a 20m minimum approach distance for seals and 10m for seabirds. This is less stringent than the nationally recognised WiSe scheme, which recommends that boats stay 50m from seals and seabird colonies. The group have also agreed on, and mapped out in detail, seasonal exclusion zones around the most



sensitive sites which extend 50m out in most cases. The process of stakeholders deciding collectively on the content of the Code has led to a compromise on the recommended approach distances, but has also resulted in the full engagement of stakeholders. The resulting compromise means that the measures agreed should be understood and accepted by all stakeholders, and are more likely to be followed as a result. Although it also means that neither boat operators nor conservationists are entirely happy with the agreed distances. There are also some skippers who have not agreed with the Code from the beginning and continue to argue that they should not be excluded from certain seabird / seal sensitive areas, and should be trusted to approach sites sensitively and avoid disturbing wildlife by observing the reaction of the wildlife. They feel strongly that creating voluntary agreed no-go zones creates honey pots of other sites, leading to overcrowding at those sites. On the other hand, instances of poor boat handling around wildlife continue to be seen and reported, and a high level of fast boat traffic within the marine SAC which is perceived to be a major problem.

The initiative involves development of policy with respect to non-compliance with the code and breaches result in a series of warnings – both written and verbal, and can culminate with an operator being evicted from the scheme.

A significant limitation of the voluntary approach has been limited funding to resource the management, coordination, liaison, facilitation and arbitration that are needed to ensure the success of the Code. Training events are few and far between and publicity materials are limited. There is no financial support from members (boat operators) other than “in kind” and they are not inclined to pay membership fees, and currently there is little funding from other key stakeholders. The lack of direct statutory responsibility for any one organisation for the management of the marine SAC means that funding is difficult to source and over half of the project officer’s time is spent seeking funding rather than developing the project.

A further difficulty is policing the Code. Currently it is self-policed and monitoring is ad hoc with members supposed to report incidents which they believe to be non-compliance with the code. Operators are, not surprisingly, reluctant to report incidents involving other local operators and the majority of allegations of non-compliance therefore come from conservationists or wildlife observers. The result has been polarisation of the boat operators and conservationists, with the result that meetings can be confrontational and not always productive. Furthermore, as the Code is voluntary there is little in the way of sanctions for operators who persistently ignore the Code since removing them from the group would be counter-productive and the only penalty for withdrawal from the Code is that an operator would not be able to advertise in PCNPA visitor centres / publications.

Some stakeholders would prefer licences or permits to be issued to responsible operators, particularly within statutory protected areas, thus creating a system which would allow

limits on the number of vessels that could operate in an area and / or the number of trips allowed. It would also provide a mechanism by which licences or permits could be revoked in the event of serious or continuous breaches of the measures in place, preventing operators that refused to comply giving the sector a bad reputation. In addition, a properly resourced statutory approach would facilitate independent monitoring and ensure a fairer approach to compliance. It is however recognised that a statutory approach would certainly be more complicated for more transient stakeholders such as kayakers.

In mid 2011, a decision was taken to refocus efforts away from the commercial operators and maintain the focus on raising awareness about the PMC to a wider user profile. This was taken in light of difficulties in engaging and involving all the commercial boat operators in the scheme and a high level of criticism of the scheme from some operators, including those involved in the process of developing and managing the PMC. A statement issued by those bodies that provided funding for the development and management of the PMC concludes that the dependence on voluntary commitment and self-policing mean that there are always going to be some who ignore or resent the perceived constraints, or remain unhappy with the level of protection provided for wildlife. It is possible that a more statutory approach will now be encouraged.

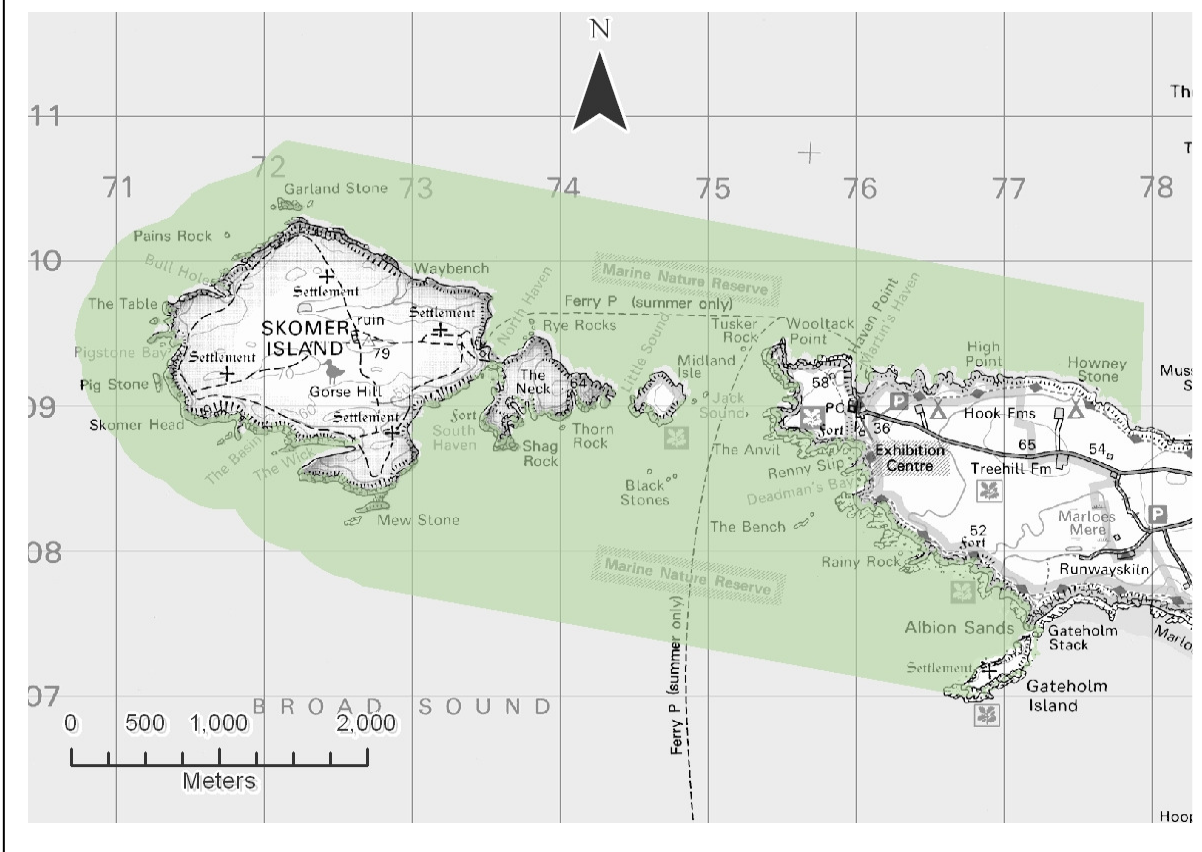
### **Case Study 6: Skomer Island waters - from voluntary to statutory protection**

Initially the waters around Skomer Island were identified as a Voluntary Marine Reserve (VMR) before subsequently being designated a statutory Marine Nature Reserve (MNR) in 1990. Both original boundaries are now also encompassed within the Pembrokeshire Marine SAC. Between 1976 and 1986, management of the VMR was dependent on a Code of Conduct to promote good practices amongst boat users, anglers and divers, as well as more general provisions such as disturbance noise, and obstruction addressed to all users. It was assumed (by the voluntary management committee) that the Code of Conduct was being observed and that the users of the waters were well informed about acceptable practices. However, following the appointment of a Liaison Officer by the Nature Conservancy Council (NCC) in 1987, which allowed greater interaction with users of the site, it became apparent that awareness of and adherence to the Code were both poor. For example, from a questionnaire survey it was apparent that many recreational scuba divers using the site were not fully aware of all the Code of Conduct entailed, though most assumed that taking of shellfish while diving was not allowed<sup>16</sup>. Consequently, it became clear that unless an activity was to be controlled or restricted using statutory means, the users were unlikely to

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<sup>16</sup> Bullimore, B., 1987. Skomer Proposed Marine Nature Reserve Nature Conservancy Council Liaison Officer Report for the Period 5 May – 20 September 1987.

Map 5: Skomer MNR boundary



follow the voluntary measure. This was because they felt that if managers would not take the time and effort to introduce a measure using statutory means then it couldn't be very important and / or there was no means to enforce it.

During the voluntary phase there were inadequate resources to either fully engage with the marine users or to adequately monitor behaviour and adherence to the voluntary measures, which resulted in a false perception or assumption of the success of the voluntary measures. In addition, during this time the focus of management was on softer target sectors such as recreational diving, while commercial pot fishing and recreational angling were not tackled since both were perceived to be difficult to address. The result, as clearly demonstrated by the response to the consultation on the statutory MNR proposal, was alienation of potentially one of largest groups of prospective supporters.

Efforts to designate the waters of Skomer as a statutory MNR, following years as a voluntary reserve, were unambiguously driven by the complete ineffectiveness of the voluntary measures to protect the site. However, even once designated as a MNR, a number of voluntary approaches to management of activities still had to be introduced because of the weakness of the legislative provisions, including a "netting free zone", "access restriction zones" and "no anchoring zones".

The "netting free zone" was introduced by voluntary agreement between the fishing industry and local Sea Fisheries Committee (SFC) at the request of the Countryside Council for Wales (CCW). Although the original area proposed was much reduced before it was

agreed, voluntary measures continued to be ignored. The “access restriction zone” has been routinely ignored by local fishermen and occasionally by recreational users, though the latter is usually caused by a lack of knowledge of the area. While more successful, the “no anchoring zone” in eel grass beds is still ignored on occasion despite marker buoys, free visitor mooring buoys and considerable effort to ensure awareness of the zone.

Conversely, a statutory ban on scallop dredging and scallop collection using a sea fisheries byelaw, and the introduction of a speed limit byelaw by CCW have largely been effective in the MNR, although considerable education and awareness raising has been required to achieve this, and enforcement effort remains necessary. When divers are advised there are potential penalties for collection of scallops, there is generally a good level of compliance in both not collecting animals and, in the rare cases when divers unaware of the provisions have taken scallops, returning the animals to the sea. This protection of the scallops has resulted in significant population increases<sup>17</sup>. Furthermore, statutory protection of the seabed through the use of a byelaw prohibiting the use of dredges or beam trawls within the MNR, appears to have contributed to the high quality of sediment faunal communities within the MNR.

Whilst the statutory status of the MNR has also secured greater compliance with some voluntary approaches used (for example the Code of Conduct which addresses the behaviour of boat users and divers), the request that recreational angling interests avoid the MNR area for competitions is routinely ignored. Conversely, voluntary exclusion zones to protect bird nesting ledges and seal pupping beaches around Skomer have been largely successful. Success of voluntary measures in this instance may be influenced by the fact that the people using the area are generally there to see the birds and seals, and so feel comfortable with compliance with voluntary measures as it is ultimately protecting their interest.

### **Case study 7: St Abbs & Eyemouth Voluntary Marine Reserve**

St Abbs & Eyemouth Voluntary Marine Reserve (VMR) was established in 1984 as a result of concerns that diving pressure might be having a detrimental impact on the marine environment. It is the result of a shared common concern within the local community, including local fishermen, divers and conservationists, who have always supported the establishment of the VMR, which has been a key factor in the success of the site. The VMR aims to balance the needs of the area’s wildlife with the needs of recreation and traditional creel fishing. The fact that it does not have statutory backing means that it has greater

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<sup>17</sup> Lock, K., R.Gibbs, M.Burton, P.Newman, 2008. Skomer Marine Nature Reserve *Pecten maximus*, King Scallop Survey 2008. CCW Regional Report CCW/WW/09/04.

flexibility in considering management options. The site continues as a VMR but now falls within the Berwickshire and North Northumberland Coast European Marine Site (EMS) which provides further protection to, and monitoring of, specified habitats and species within the EMS. The inclusion of a wide range of people on the VMR management committee has contributed to better management of the site.

While the St Abbs and Eyemouth VMR is considered a successful voluntary approach, there have been difficulties experienced. In particular, the lack of statutory power to address non-compliance with the Code of Conduct which governs the VMR, and the lack of dedicated funding which results in much of the Ranger's time being spent on fundraising. While the lack of ability to address non-compliance with the Code was a problem initially, as divers would collect shellfish which is not allowed by the Code, 27 years on divers now come to dive in the area because it is a VMR. In addition, collection of shellfish is now unlikely as the majority of dives take place from hardboats and the skippers would not allow landing of any shellfish since this is not allowed by the Code, and could also in the long run affect their business should the site become degraded.

Further difficulties include:

- the need to continually justify the Ranger position, particularly in difficult economic times, yet without the Ranger there would be a VMR in name only,
- incursions by the fishing industry into the VMR, which overlaps with a fisheries statutory instrument. This excludes trawling activity from a "static gear box" designed to protect the traditional commercial creel fishery, and while these infractions are reported to the regulating authority, they do not have sufficient resources to prosecute,
- an unregulated shellfishery within the VMR, so it is not clear if it is sustainable or not.

Despite these difficulties, it is considered that the benefits of the St Abbs and Eyemouth VMR outweigh the difficulties, and without the local community-led voluntary approach further damage to the area would have resulted.

### Case Study 8: St Agnes Voluntary Marine Conservation Area

St Agnes Voluntary Marine Conservation Area (VMCA) was established on the north coast of Cornwall in 1997<sup>18</sup>, including a small-scale voluntary no-take zone (NTZ), agreed by the local Quay Fishermen's Association and Cornwall County Council's Countryside Service. The aims of the voluntary initiatives were

the conservation and enhancement of local shellfish stocks to improve the local fishery's long-term sustainability. In 2000, a programme of work was developed to evaluate the effectiveness of the NTZ, but difficulties ensued and it was eventually decided to terminate the work earlier than originally anticipated. Difficulties experienced included problems with sampling gear being tampered with between deployment and recovery, portions of the scientific catch being removed, and a continuous low-level of shellfish potting within the NTZ. The non-compliance with the NTZ was largely attributed to a full-time fisherman who had supported the initiative initially, but withdrew support and refused to stop fishing in the area.

When the programme of work was terminated, the only reliable data that had been collected showed that after 4 years there was no significant difference in the size of lobsters or the abundance of lobsters and crabs between the voluntary NTZ and a nearby control site. As a result it was concluded that the NTZ had failed as a conservation measure. There were however lessons that could be drawn from the initiative. This included the difficulty of designing, implementing and evaluating ecologically effective NTZs without the assistance of scientists and natural resource managers, versus the risk of lost ownership and withdrawal from an initiative by the local fishing community because of the involvement of outside experts.

While the initiative was considered to have failed, the majority of the members of the St Agnes Quay Fishermen's Association reportedly remained interested in pursuing opportunities for a voluntary NTZ and remained proud of the initiative despite the

Map 6: St. Agnes VMCA boundary and voluntary NTZ (orange)



<sup>18</sup> Hoskin, M.G., 2006. Demonstration trial of a voluntary shellfish no-take zone at St Agnes, Cornwall. Consultancy report by Coastal & Marine Environmental Research for Cornwall County Council, Truro, Cornwall.

difficulties experienced. The final recommendation of the report, however, is that community-based, voluntary NTZs should not be relied upon to achieve important conservation objectives for fisheries and / or the wider marine environment; although where opportunities arise they should be pursued, but alongside a strategic network of statutory NTZs with “robust enforcement”.

### **Case study 9: Burry Inlet**

In 2010, a voluntary agreement was reached between the Environment Agency Wales and cockle fishermen on the Burry Inlet, which falls within the Carmarthen Bay and Estuaries EMS, whereby a specified cockle bed was not to be fished for six weeks. The arrangement worked well for five weeks, but during the sixth week the agreement was broken and the bed heavily fished.

The result is that future management will rely on statutory controls using byelaws and licence conditions. Subsequently a byelaw closure was put in place from 1<sup>st</sup> April 2011 and runs through to 31 March 2012 for two cockle beds. In addition, a ruling was also put in place that no cockles over 20mm in diameter should be taken in order to safeguard stocks. It was recently reported however that despite the statutory controls, cockle fishermen are still taking over-sized cockles<sup>19</sup>.

### **Case Study 10: Portsmouth Harbour**

Portsmouth Harbour, a marine SPA and within the overlapping Solent marine SAC, is designated for its internationally-important bird assemblages and associated mudflat and sandflat habitats, which support eelgrass meadows. The eelgrass forms an important feeding habitat for a variety of wintering wildfowl including dunlin, dark-bellied brent geese, black-tailed godwits and red-breasted mergansers. Clam dredging on the eelgrass beds was posing a high risk to the site, so in October 2009, a voluntary agreement not to clam dredge on specific areas was reached between the Queen’s Harbour Master, Natural England and local fishermen<sup>20</sup>. The proposed voluntary agreement was presented during a meeting and was signed by those fishermen present. It was subsequently sent to those unable to attend the meeting and two-thirds of the fishermen contacted supported the

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<sup>19</sup> <http://www.thisissouthwales.co.uk/Action-threat-sized-cockle-hauls/story-12448975-detail/story.html> dated 15th May 2011, accessed 16<sup>th</sup> June 2011.

<sup>20</sup> [http://www.marinemanagement.org.uk/protecting/conservation/portsmouth\\_ems.htm](http://www.marinemanagement.org.uk/protecting/conservation/portsmouth_ems.htm) plus associated documents available on the website including Evidence Summary, MMO byelaw and a letter to local fishermen.

voluntary agreement. However, subsequent investigations a few weeks later found some fishermen were continuing to dredge for clams and the sensitive eelgrass beds were still being damaged. Clearly the voluntary agreement was not effective, and as a result it was withdrawn. A Marine Management Organisation (MMO) emergency byelaw was subsequently introduced as the most appropriate short term solution and in the long term a permanent byelaw is to be introduced. Despite the continued action of some fishermen following the negotiation of the voluntary agreement, it is reported that at least one vessel owner supports the statutory action, and considers that the properly protected eelgrass beds will improve the spawning stock of clams for the wider estuary system.

### **Case study 11: Tremadog Bay**

In 2005, a voluntary agreement was reached between local fishermen, the local Sea Fisheries Committee (SFC) and CCW to close an area in the north-west of Tremadog Bay, within the Pen Llyn a'r Sarnau SAC, to scallop dredging. The rest of the Bay was to be left open to scallop dredging but the voluntary arrangement also agreed that there would be no further extension or intensification of fishing effort compared with the previous year, i.e. the first year of scallop dredging in the Bay by a single boat with a low intensity of fishing. The agreement followed increased interest in scallop dredging in the Bay within areas of the SAC that had not traditionally been dredged.

Within days, boats skippered by people who had been present at the meeting were observed fishing within the area that had been closed, thus breaking the voluntary agreement that fishing should be by one boat only and in a limited area (the one boat was not one of the boats observed fishing). At a further meeting between CCW, the SFC, and scallop dredge fishermen, it was advised that since the voluntary agreement to protect the SAC had been breached, and a full statutory closure of the northern part of the Bay to scallop dredging would need to be introduced for the remainder of the season. This measure was put in place and retained for subsequent fishing seasons. More recently, a Wales Scallop Order has been introduced which includes measures that exclude scallop dredging from the whole of the SAC.

It should be noted that despite the statutory closures, repeated incursions by scallop dredgers to fish in closed areas have been reported<sup>21</sup>, leading to damage to the site despite the statutory management measures in place. Prosecution of alleged illegal fishing requires fishery officers to apprehend vessels in the act of fishing in closed areas. Even if damage that can be attributed to scallop dredging is detected on the seabed, without this evidence it is virtually impossible to link the damage to specific vessels. Proving cause and effect in

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<sup>21</sup> Seasearch Wales / Cymru 2009 Summary Report. Marine Conservation Society & Seasearch.



relation to fishery impacts in the subtidal environment is extremely challenging because the damage is out of sight; this highlights the need for effective compliance monitoring of potentially damaging activities in order to try and prevent such damage occurring in the first place.

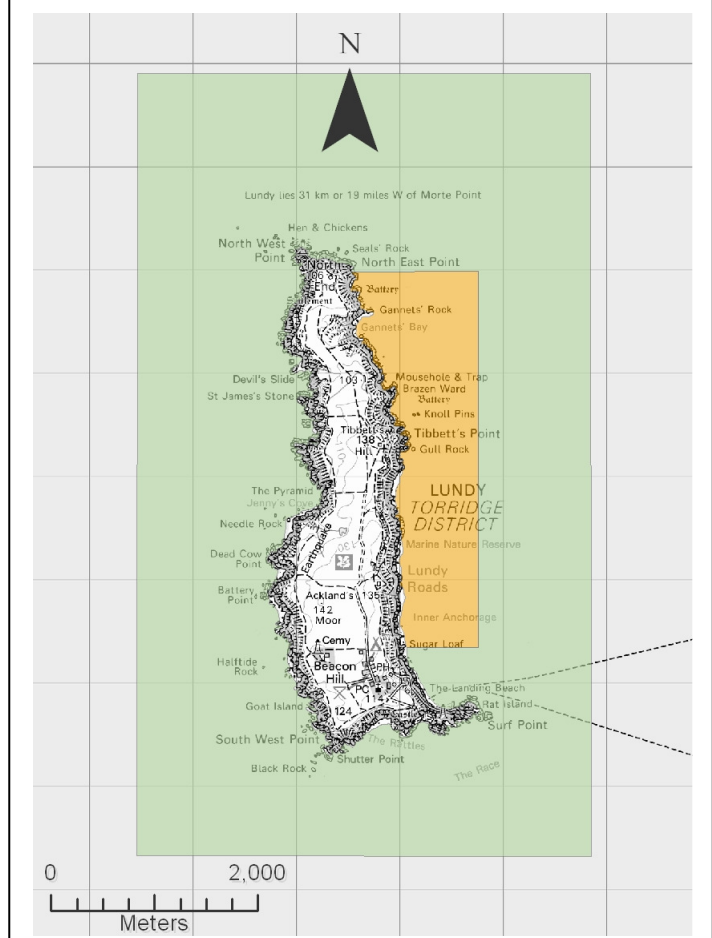
### Case study 12: Bembridge Ledges

In the mid-80s, a proposed Voluntary Marine Conservation Area (VMCA) for the Bembridge Ledges on the Isle of Wight was never realised due to strong opposition from some of the local community. At the time it was not clear what the purpose of the VMCA would be or what management measures might be introduced. On reflection it was felt that strong leadership and clarity of purpose were lacking, and would have been essential to achieving a voluntary approach.

### Case study 13: Lundy

The waters around Lundy Island in the Bristol Channel were first a Voluntary Marine Reserve (VMR) in 1971, then England's first and only statutory Marine Nature Reserve (MNR) in 1986, and subsequently a marine SAC. It is now the first Marine Conservation Zone (MCZ) in the UK, following designation in 2010<sup>22</sup>. While a VMR, a Code of Conduct was developed to prevent the taking of sea fans and urchins, but the intention was always to seek statutory protection for the site, and the voluntary initiative was seen as a way to raise awareness of the importance of the site to help achieve this. The voluntary provisions led to "gentleman's agreements" with local stakeholders on the collection of sea fans and scallop dredging which were

Map 7: Lundy MCZ boundary (green) and NTZ (orange)



<sup>22</sup> <http://www.naturalengland.org.uk/ourwork/marine/protectandmanage/mpa/mcz/lundy.aspx>

largely adhered to, but were considered relatively easy to achieve e.g. scallop dredging was unlikely to be profitable in the area.

It is considered that the real conservation benefits for the site came when potentially damaging activities were effectively regulated (via statutory measures). For example, since the a 3.3km<sup>2</sup> statutory NTZ was establishment in 2003 using a SFC byelaw, the area has seen a significant increase in the size and abundance of lobsters, along with spillover into the adjacent area, and a significant increase in the size of brown crabs<sup>23</sup>. The MCZ is now showing signs of other seabed community improvements.

#### **Case study 14: Wembury Voluntary Marine Conservation Area**

The designation of a Voluntary Marine Conservation Area (VMCA) at Wembury, South Devon has provided a major focus for local community engagement and for education and awareness activities. During the year a programme of education and awareness events is organised to encourage the local community, stakeholders and visitors to the area to understand the importance of the site and to raise awareness of the threats to the wildlife.

### **4.3 Features of successful voluntary approaches**

#### **4.3.1 Community and stakeholder support and involvement**

A common theme identified from all of the successful voluntary approaches is the need for early buy-in and strong commitment from the local community, key figures within the local community, and local non-governmental organisations. Voluntary approaches have been most effective when they have been lead by the local community and where there has been the greatest community and local stakeholder support. In support of generating early buy-in and strong commitment, the availability of coherent and robust data on the threat to an area and providing a baseline against which the success of a voluntary measure can be measured is seen to be important.

Voluntary approaches have clearly worked better when there has been full engagement of all relevant stakeholders and it is recognised that patience is needed as it can take time to build relationships and to develop the necessary confidence in an initiative. When there has only been partial stakeholder involvement or half-hearted involvement, voluntary approaches have tended not to deliver on the objectives that have been established, and frequently collapse or fail. Voluntary approaches are generally characterised by a dogged

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<sup>23</sup> <http://www.naturalengland.org.uk/ourwork/marine/protectandmanage/mpa/mcz/lundy.aspx>

determination on the part of participants, in particular to resolve differences of opinion that might arise, and to be inclusive of all relevant stakeholders.

Voluntary initiatives can be particularly useful in raising awareness of, and education for, both local communities and stakeholders (who may be local, but may also be drawn to a site from a wider area). Voluntary approaches can provide a strong focus for the local community and for engagement in the management of a site. Local community-based voluntary initiatives have also proved useful in organising coordinated resistance to damaging commercial activities.

#### 4.3.2 Leadership and ownership

Further important factors identified include the value of strong, patient local leadership and the need for a neutral central contact point, coordinator or secretariat who does not assume a position but facilitates stakeholder engagement. The management or governance for a voluntary approach should be transparent and coherent.

The collaborative development of a voluntary measure by the stakeholders ensures that it is both understood and generally accepted by those involved in the activity and it encourages ownership of the voluntary measure. It does need to be recognised, however, that collaborative development of a voluntary measure can lead to compromise on the measure(s) to be adopted, but this can be positive in that the agreement reached is more likely to be understood and accepted by all stakeholders, and therefore more likely to be implemented.

#### 4.3.3 Where voluntary approaches work best

Voluntary approaches can be particularly successful for achieving “easy wins” or “low hanging fruit”. For example, achievements that will clearly benefit the stakeholders, or are in keeping with the philosophy of the stakeholders such as stopping shellfish collection within protected sites by divers, or limiting disturbance to wildlife caused by those wanting to view the wildlife. In these cases guidance as to appropriate behaviour is often all that is required.

Voluntary approaches tend to favour small scale approaches, where monitoring of behaviour or compliance is simple. In some cases it is considered that the voluntary self-policing of a measure can be seen as a benefit of the voluntary approach, particularly when statutory bodies are under resourced. Internationally there are some good examples of peer pressure being particularly effective in encouraging compliance and adherence to rules e.g. whale watching operators keeping an eye on each other and reporting examples of misconduct to the relevant body, or where there is potential for competition or even conflict, e.g. between diving boats and fishing boats. However, generally the difficulties associated with self-policing are seen to be a challenge with respect to voluntary approaches. Voluntary

approaches can be cheap and quick to achieve when compared to a statutory approach, though this will not always be the case. This perception may be the result of voluntary measures working best for simple cases, which would be cheap and quick to manage by statutory measures as well.

#### **4.4 Challenges facing voluntary approaches**

##### **4.4.1 Vulnerability to non-compliance**

A number of common themes can be identified from the information and responses to questionnaires with respect to the challenges facing voluntary approaches. One of the major challenges for any voluntary approach is addressing the vulnerability to the actions of those individuals or bodies which do not participate in the initiative, or who opt-out, or who choose not to comply with the voluntary measure or approach, particularly when there is frequently no meaningful incentive to adhere to the rules. To be successful, a voluntary approach, particularly one which imposes restrictions on a damaging or potentially damaging activity, can only succeed if there is full commitment from all stakeholders and if behaviour and adherence to the voluntary measure is monitored. Voluntary measures are also particularly vulnerable to changing external circumstances and changing economic conditions, in particular a down-turn in the economic climate and / or increased activity, for example, boats arriving from further afield to harvest a marine resource. In addition, the involvement of a wide range of stakeholders, or simply a large number of stakeholders can result in over-complicated rules creating a problem for compliance.

A significant reoccurring theme associated with voluntary approaches is that should the approach not succeed, there is the risk of serious damage to a site, or interference with the population of wildlife in need of protection, coupled with a lack of (or very limited) opportunity to take action against persistent offenders or individuals / bodies that cause damage or disturbance. It would be counter-productive to remove persistent offenders involved in a voluntary approach from the initiative, since this would gain nothing, and in the case of persistent offenders not involved in the initiative, there is virtually nothing that can be done. The lack of, or limited opportunities for, enforcing compliance is a major concern for many voluntary approaches. Although from the Helford VMCA case study it is apparent that there were seen to be some benefits from self-policing, in most cases it was felt to be inappropriate, resulting in an ad hoc approach to enforcement as policing can then only take place when participants or stakeholders are available. In some instances, self-policing has led to further polarisation of views between different stakeholders and a consequent deterioration in stakeholder relations.

Also, there is a feeling that for some sectors there is, as yet, no ethos, understanding or acceptance of the need to comply with conservation management measures, which are seen as an unreasonable burden, or to accept the rights or views of other stakeholders.

Individual self-interest is too strong, and historically too many activities have been able to take place at sea in a largely unregulated manner. The need for any kind of management is simply not recognised and non-compliance is rife. In addition, a lack of understanding of the ecological importance of the marine environment, the services our seas provide to us and the potential for long term socio-economic benefits undermines voluntary approaches.

In some cases, non-compliance with statutory approaches can be a problem too, however there is more likely to be an opportunity, although it may be difficult, to take further action.

#### 4.4.2 Lack of funding and resources

Another area of common concern was the lack of funding and resources available to voluntary approaches, to both maintain, and further develop the approach, including addressing monitoring and compliance. In many cases a significant amount of time is spent trying to identify funds and resources, instead of focusing on the work that needs to be undertaken. Long-term voluntary agreements generally require a very significant investment in ongoing awareness raising, education and maintenance of social capital to ensure their success.

#### 4.4.3 Limited application of voluntary approaches

Voluntary initiatives generally do not allow an option to limit access to a site, or use of a resource, thus there is no opportunity to prevent over-use of a site or resource by this route. Even if a voluntary initiative imposed restrictions on access, there would be no action possible to prevent new stakeholders accessing the site or resource, or even existing stakeholders that chose not to participate in the initiative. Furthermore, voluntary initiatives tend to find it difficult to tackle multiple issues or consider multi management approaches (in large part due to the resources available). Therefore, voluntary approaches tend to focus on easy targets, where they can add value, but this tends to be at the expense of tackling tougher issues that are frequently more critical in conservation terms. Voluntary agreements (such as Codes of Conduct) can suffer from the “lowest common denominator effect”, in reaching a negotiated agreement between a range of stakeholders.

Finally, the failure of a voluntary approach for a site can undermine the possibility for further attempts at either voluntary or statutory site protection, and tends to lead to disillusionment amongst stakeholders.

#### 4.5 Statutory approaches

The failure of a voluntary approach inevitably puts the emphasis back onto statutory processes. Whilst statutory approaches are not always considered a panacea, a range of benefits of a statutory approach have been identified by this research, including:

- the provision of clear boundaries that are enforceable;
- a clear focus for management;
- the ability to limit the scale of potentially damaging activities, or even eliminate a particularly damaging activity, and;
- less opportunity for misinterpretation.

Though even a statutory protected area, with statutory management measures in place to ban a potentially damaging activity can fail if resources are not made available to address compliance and enforcement. Furthermore, statutory measures in specific instances can be costly and time consuming, rigid and inflexible; thus unable to respond quickly to a changing situation.

Statutory approaches allow for systems to be established which can be used to limit access to an area or activity and provide legitimacy for a stakeholder, for example, through awarding a license or permit. In addition, the use of licences and permits also provides an opportunity for response in the event of non-compliance or infringement, such as revoking a licence or permit if needed. A statutory approach also facilitates monitoring – since it is imperative that conservation objectives are achieved, and also important that value for money is proved.

It is argued that statutory approaches can be draconian and top-down, potentially alienating stakeholders. However, voluntary measures will only work where stakeholders are prepared to agree and cooperate to implement a measure, and legal reinforcement of the same measure is unlikely to have a major impact on those stakeholders.

It is considered likely that statutory approaches will fare better than voluntary approaches in “hot spot” areas of activity, when commercial activities need to be managed, or when powerful enterprises are involved. Statutory approaches tend to hold more weight with other government departments, particularly when there is interest in licensing an area for exploitation or licensing an activity. The use of statutory approaches also allows third parties an opportunity to ensure that the marine interest is protected through legal action.

Generally it is considered that the real benefits for protected areas come once the site has a statutory designation and potentially damaging activities are effectively regulated using

statutory mechanisms. Indeed, one of the key findings of the UNEP study of 20 MPAs, was the fact that economic, interpretative, knowledge and participative incentives can be complementary to legal incentives but they cannot replace them<sup>24</sup>. Management measures inevitably require enforcement, and statutory measures usually facilitate the necessary resources for enforcement to take place – be it “hard” enforcement by an officer with legal powers or “soft” enforcement due to the presence of a warden or similar post patrolling or monitoring a site. To quote one respondent to the questionnaire (Annex), “Having used both voluntary and statutory measures over the last 20 years I would say that the voluntary nature of management has played no part in their success”.

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<sup>24</sup> Jones, PJS, Qiu W, and De Santo EM (2011): Governing Marine Protected Areas – Getting the Balance Right. Technical Report, United National Environment Programme.

## 5. Conclusions

Within the spectrum of voluntary to statutory approaches to site protection available to site managers, there is no single best response to marine site management that will fit all cases. Voluntary approaches can work, however the case studies and analysis in this report indicate that those that are most successful are local, community-driven initiatives such as Helford VMCA, Lamlash Bay, and St Abbs & Eyemouth VMR. Generally, voluntary initiatives driven by a statutory body in the place of a statutory management tool have not been successful, and there are a number of instances where voluntary approaches have proven unable to deliver the conservation objectives deemed necessary. Indeed, the ineffectiveness of voluntary approaches has been a key driver for the introduction of many statutory approaches including for Skomer MNR, Lyme Bay reefs, and Tremadog Bay. This is a particularly valuable lesson to inform direction of travel for the Welsh Government, and other UK administrations, when designing management measures for statutory MPAs, such as MCZs.

### Where voluntary approaches are successful

Voluntary approaches can be successful when applied in small communities, on a small scale, or to address single, simple issues and / or “easy wins”. Activities which may be successfully addressed using voluntary approaches tend to be non-commercial activities where the intrinsic value of the environment is important to the activity, for example diving and wildlife watching. Most importantly, successful voluntary initiatives do not result from a top-down approach - the most successful voluntary approaches have been initiated and developed in small communities, as bottom-up mechanisms, with local leadership and broad local community support.

The case studies analysed in this report highlight some key lessons for the successful application of a voluntary approach to marine protected area management:

**The need for clarity and leadership:** a successful voluntary approach must have a clear purpose, strong and patient leadership, and transparent (independent) governance and coordination;

**The need for broad community support and involvement:** a broad base of support and commitment for a common vision is required from the outset if a voluntary approach is to succeed. Stakeholder involvement should not be narrowed to a few sectoral interests, and the full support of all stakeholders is essential (majority support is not sufficient). This will require an inclusive approach, building confidence amongst stakeholders, and working to



reconcile different views. Early and continued dialogue and education/awareness raising, and outreach are essential if this is to be achieved;

**The need for good information:** in order to put in place a successful voluntary approach to management, it is vital to have reliable, up-to-date information on the status of the resource/area to be protected and the threat(s). Regular monitoring (including of compliance) and feedback are also essential;

**The need to be well resourced:** critically, voluntary approaches to marine protected area management will not succeed into the long-term if they are not adequately resourced.

For the right issue/area, and following the lessons laid out above, a voluntary approach to marine management can be successful, and can have additional benefits. A voluntary approach to management can be useful to raise awareness about a site, its importance and its protection. Voluntary approaches can also encourage ownership and responsibility, and can avoid the mistrust that can be engendered by a top-down scenario. In some instances voluntary approaches to management also appear to provide greater flexibility, and can be cheaper and quicker to instigate than statutory approaches.

### **Limitations of voluntary approaches**

In many cases it can be concluded that the benefits of voluntary approaches are limited, progress is slow and fraught with conflict and difficulties, and adequate funding is both vital for success and hard to secure. Voluntary approaches will struggle to address multiple issues, multi-management scenarios, or tough targets. Without a statutory approach in such instances, restrictions on capacity will be difficult or impossible to put in place and/or enforce, should they become necessary.

Alongside the key lessons for the successful application of voluntary approaches, outlined above, the case studies analysed in this report also highlighted some key difficulties associated with a voluntary route to marine protected area management:

**Vulnerability to circumstances:** voluntary approaches to management will always remain vulnerable to change, for example in the opinions and dynamics of those individuals involved, to stakeholders opting out, or refusing to engage from the outset, and also particularly vulnerable to change in the economic climate, or increase in economic pressures. Voluntary approaches are also vulnerable to non-compliance, and will have at best limited options to address / discourage non-compliance;

**Relative weakness:** voluntary approaches will carry less weight with stakeholders than a statutory approach, and leave managers with no recourse to legal or enforcement action to prevent a damaging, or potentially damaging activity. For these reasons, it is likely that statutory approaches to management will inevitably be required when commercial operations need to be managed;

**Requirement for compromise:** in order to secure stakeholder sign-up and involvement with a voluntary management approach, it will usually be necessary to compromise on the terms of the management approach. This can lead to over-complication to reach consensus between all stakeholders, but more importantly can hinder the achievement of the conservation aims of the management.

The inability of voluntary approaches to ensure full engagement of stakeholders, adequately address compliance and limit activities means it would be particularly inappropriate to rely on such an approach in highly protected sites, where a single stakeholder deciding to “opt out” or not participate would undermine, or even destroy, the purpose of the highly protected designation.

### **Use of statutory approaches**

It is important to recognise that it is not always a case of implementing either a voluntary approach or a statutory approach to marine management, voluntary measures are often a step on the way to a statutory approach for a number of reasons, including:

- a voluntary approach was considered to be a short-term step along the way to a statutory approach, which was always the long-term intention,
- a statutory approach to the management of an activity results from the failure of the voluntary approach, or
- a statutory approach follows on from a voluntary approach as a natural consequence of the importance of the area and improvements to the regulatory framework facilitating designating of a statutory site.

Statutory approaches inevitably hold more weight than voluntary ones, and can allow for the possibility of legal action to prevent a potentially damaging activity, or regulate potentially damaging activities. With a statutory approach it is possible to introduce a system of licensing or permitting which can provide validity to stakeholders, be used to limit capacity of an activity and, in the event of serious or continuous non-compliance, be revoked. They can also provide an opportunity for legal recourse in the event of non-compliance. Statutory approaches are generally the preferred mechanism to use when powerful enterprises and / or significant economic activities need to be addressed, and in

“hot spots” of activity where multi-activity management is necessary. Finally statutory approaches generally facilitate better access to resources for monitoring and compliance.

## **Conclusion**

There are some circumstances where a voluntary approach to the management of a marine protected area could be appropriate, and the analysis of the case studies presented in this report has highlighted some of those circumstances, alongside some key lessons that should guide the implementation of any voluntary approach. The design and management of MPAs can encompass a number of tools within a clear strategy for successful implementation, and decisions on design should be based upon an understanding of past site issues, current issues and futures needs. Such a process requires careful planning using a risk based strategy to determine the appropriate management measures in relation to the sensitivity of designated features. In this context, the use of voluntary agreements as a management approach to controlling damaging activities within highly protected MPAs is considered inappropriate.

It must be recognised that voluntary measures are not a quick fix solution, but can still require considerable resources and a long-term commitment. If they fail, the conservation interest of a site will likely be damaged and there will be no recourse to action and nothing to prevent it from happening again. Even if the voluntary initiative does succeed, the effort of reaching consensus between stakeholders to secure success is likely to require compromise on the conservation objectives for the site. For all these reasons and more, a presumption in favour of using voluntary approaches to marine site management in the first instance is not appropriate, especially in the management plans for highly protected sites. Care must be taken to match the appropriate approach to the case in question, and in many instances, statutory management will be required to secure the conservation of a site.

## **Annex**

### **Voluntary versus Statutory Management Questionnaire May 2011**

#### **Background:**

RSPB and Wales Environment Link (WEL) are conducting a review of the evidence around the application of voluntary management to marine protected areas, and the value of voluntary approaches and statutory approaches in terms of success or failure to meet the site conservation objectives. In addition, lessons that could or should inform the development of management measures for any new marine protected areas will be identified.

#### **Use of responses to questionnaire:**

It is the intention to use the information in the questionnaire responses in the final report to RSPB / WEL. Ideally it would be useful to name specific sites or locations from which information or examples have come.

It is not the intention for the names of individuals to be used, although in some cases it might be useful to indicate the type of body that the individual represents e.g. MPA Manager, local stakeholder, statutory adviser, volunteer, etc.

It is the intention, however, to acknowledge in the report those people who have contributed information and in some cases it might be possible for this list of acknowledgements to be equated with material provided in the report. If this is a concern – please indicate below.

#### **Completing the questionnaire:**

Please complete as much of the questionnaire as you can, and if you feel that there are issues around voluntary or statutory marine management that have not come to the fore as a result of the questions, please feel free to add any further information at the end. Wherever possible, please relate comments/opinions back to actual examples from your own experiences.

If you feel that there are questions that are not relevant to your experience or overlap with answers already provided, leave these questions.

**Please return questionnaires to: Sian Prior at [sianprior9@hotmail.com](mailto:sianprior9@hotmail.com)**

Thank you for your assistance with  
this work

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*Sian Prior*

## **Questionnaire**

### *General*

- A. Name of Responder:
- B. Role (in relation to the material provided) e.g. MPA manager, local stakeholder, volunteer, statutory adviser .....there are many more possibilities so please feel free to use whatever you feel is most appropriate:
- C. Contact details (if follow-up needed):
- D. Do you wish the information in the questionnaire to remain anonymous: Yes / No

If there are some elements of the information you have provided which need to remain anonymous, please clearly indicate these e.g. by use of comment boxes, or highlighting.

### *Background*

- 1. Have you been directly involved in voluntary marine management and if so, in what context? (e.g. voluntary marine protected area, marine management of a specific activity or activities within an MPA but with no statutory basis, marine management of an activity or activities outside of an MPA and having no statutory basis, other)
- 2. What was / is the nature of your involvement (this may repeat the response to Question B)?
- 3. Have you been directly involved in statutory marine management, either within an MPA context or in the wider marine environment?
- 4. What was / is the nature of your involvement (this may repeat the response to Question B)?

### *Voluntary versus statutory management approaches*

- 5. Do you consider that there are benefits to a voluntary (non-statutory) approach to marine management, if possible please give examples of where or how voluntary approaches have been beneficial and / or successful?
- 6. Please identify any factors that have contributed to the benefits / successes?
- 7. What do you consider to be the difficulties associated with a voluntary approach to marine management, if possible provide examples of where or how voluntary approaches have led difficulties or not been successful?

8. Please identify all factors that have contributed to difficulties or lack of success?
9. In your experience, have the benefits of a voluntary approach to marine management outweighed the difficulties or vice versa?
10. Do you consider that there are benefits to a statutory approach to marine management, if possible please give examples of where or how statutory approaches have been beneficial and / or successful?
11. Please identify any factors that have contributed to the benefits or successes?
12. What do you consider to be the difficulties associated with a statutory approach to marine management, if possible provide examples of where or how statutory approaches have led to difficulties or not been successful?
13. Please identify all factors that have contributed to the difficulties experienced or lack of success?
14. In your experience, have the benefits of a statutory approach to marine management outweighed the difficulties or vice versa?
15. Are there any management activities which you feel could be better achieved through a voluntary approach (rather than a statutory approach)?
16. Are there any management activities which you feel could be better achieved through a statutory approach (rather than a voluntary approach)?

Please provide any further information, examples or views on voluntary versus statutory marine management that you feel haven't been raised in the responses to the questions.

It is our intention to acknowledge all respondents by name in the final report, if you would prefer your name not to be listed, please let me know. Thank you very much for your time.

Sia Prior