

Involving stakeholders in MPA: Case studies across the Channel

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PANACHE

Management

Protected Area Network Across
the Channel Ecosystem

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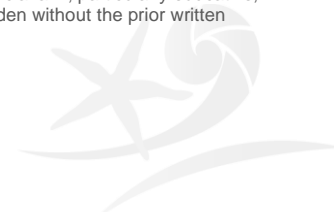


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Involving stakeholders in MPA: Case studies across the Channel

Implication des parties prenantes vis-à-vis des AMP : études de cas à travers l'espace Manche

ABSTRACT

Within the context of marine protected areas, the stakeholders involvement has been studied through five case studies: the “*Chichester Harbour Oyster Partnerships Initiative*” (CHOPI); the Parc Naturel Marin d'Iroise and the management of spiny lobster and green ormer; the European Life project PISCES (*Partnerships Involving Stakeholders in the Celtic Sea Ecosystem*); the *Invest in Fish South West* project and the *Marine Life Protection Act* (MLPA) initiative of California.

These different studies highlighted lessons learnt on participation, stakeholder involvement (general public, decision makers...) as well as the use of technical tools and consulting tools for a collaborative approach.

KEYWORDS: list of keywords, in English, separated with commas.

RÉSUMÉ

L'implication des parties prenantes dans le contexte des aires marines protégées a été étudié au travers de cinq études de cas : l'initiative de partenariat ostréicole « *Chichester Harbour Oyster Partnership Initiative* » (CHOPI) ; le Parc naturel marin d'Iroise et la gestion des langoustes et ormeaux; le projet européen Life PISCES (*Partnerships Involving Stakeholders in the Celtic Sea Ecosystem*); le projet *Invest in Fish South West* et l'initiative *Marine Life Protection Act* (MLPA) de Californie.

Ces différentes études ont mis en lumière des enseignements sur la participation, l'implication des parties prenantes (public, décideurs...) ainsi que sur l'utilisation d'outils techniques, d'outils de consultation pour une approche participative et collaborative.

MOTS-CLÉS : liste de mots-clés, en français, séparés par des virgules



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I. CHOPI

1.1 Chichester Harbour MPA site background

Chichester Harbour is a large natural harbour on the Solent straddling the county borders of West Sussex and Hampshire, encompassing approximately 3,700 ha of salt marsh, mud flats, narrow channels and sheltered open waters. It is a dynamic estuary modified through wind, wave, and tidal processes and further influenced by anthropogenic activities.



The complexity of the natural environment in Chichester Harbour lays the foundation for its importance for nature conservation. It is an Area of Outstanding Natural Beauty (AONB), a Site of Special Scientific Interest, part of the Chichester and Langstone Harbours Special Protection Area (SPA) and Ramsar site, and a key component of the Solent Maritime Special Area of Conservation (SAC).

There are a number of intertidal habitats including large areas of salt marsh and mudflats which are exposed at low tide, which are particularly important for over wintering birds. Five species of over wintering wildfowl and waders reach numbers of international importance.



Conservation Designation	Description	Legislation
Area of Outstanding Natural Beauty (AONB)	<p>"AONBs are considered to be examples of Britain's finest countryside, with landscapes of particularly distinctive character, remarkable natural beauty and high ecological value. They are protected by law to ensure the conservation and enhancement of their natural beauty, not just for the present, but also for future generations."</p> <p>National Association for AONBs</p>	<p>National Parks and Access to the Countryside Act, 1949</p> <p>Countryside and Rights of Way Act, 2000</p>
Special Protection Area for Birds (SPA)	<p>SPAs are classified for rare and vulnerable birds and for regularly occurring migratory species</p> <p>Chichester Harbour is part of the Langstone and Chichester Harbours SPA, designated for a variety of wildfowl and wading birds, as well as breeding terns.</p>	<ul style="list-style-type: none"> • Directive 2009/147/EC (Birds Directive) • In the UK, the provisions of the Birds Directive are implemented through the • Wildlife & Countryside Act, 1981 (as amended) • The Conservation of Habitats and Species Regulations, 2010 • The Offshore Marine Conservation (Natural Habitats & c.) Regulations, 2007
Ramsar International Wetland Protection Site	<p>Ramsar sites are wetlands of international importance, designated under the Ramsar Convention.</p> <p>The Ramsar Convention is an international agreement signed in 1971, which provides for the conservation and good use of wetlands.</p> <p>The UK Government ratified the Convention and designated the first Ramsar sites in 1976.</p>	<p>Ramsar sites in England are protected as European sites (as set out in The Conservation of Habitats and Species Regulations, 2010</p>

Conservation Designation	Description	Legislation
Special Area of Conservation (SAC)	<p>SACs are areas provided with special protection under the European Union's Habitats Directive. They provide enhanced protection to key plants, animals and habitats and aimed at conserving biodiversity.</p> <p>Chichester Harbour is encompassed within the Solent Maritime SAC.</p>	<ul style="list-style-type: none"> • Directive 1992/43/EEC (The Habitats Directive) • In the UK, the provisions of the Habitat Directive are implemented through the • Wildlife & Countryside Act, 1981 (as amended) • The Conservation of Habitats and Species Regulations, 2010 • The Offshore Marine Conservation (Natural Habitats & c.) Regulations, 2007
SSSIs – Sites of Special Scientific Interest (3695 ha)	SSSIs are considered to be the country's exemplary wildlife and geological sites.	Wildlife & Countryside Act, 1981 (as amended)
5 Local Nature Reserves and 6 SNCIs (Sites of Nature Conservation Importance)	<p>LNRs are sites which have wildlife or geology of special local interest. Local Nature Reserve is a statutory designation made by local authorities.</p> <p>SNCIs are non-statutory designations of areas that are important for wildlife and geology at a county scale, Once identified, designation and protection of the areas are done by local authorities through planning policies in their development plans</p>	<p>Section 21 of the National Parks and Access to the Countryside Act 1949, and amended by Schedule 11 of the Natural Environment and Rural Communities Act 2006</p> <p>Town and Country Planning Act, 1990</p>

Table 1. Chichester Harbour conservation designations



1.2 Background to the Chichester Harbour Oyster Partnership Initiative (CHOPI)

1.2.1. The issue

Chichester Harbour has supported a population of native oysters (*Ostrea edulis*), believed to be part of the wider Solent stock, since records began. The productivity of the Chichester Harbour oyster fishery and that within the wider Solent has been declining, with studies in the vicinity indicating recruitment failures for 2008, 2009 and 2010 (David Palmer, pers. comm., Shellfish Biologist, CEFAS, Lowestoft).

There are numerous theories as to why the oyster population has declined, these include; an increase in the competitive slipper limpet *Crepidula fornicata*, an increase in the predatory winkle *Ocenebra erinacea*, a skew in the sex ratio (male:female), the oyster disease *Bonamia ostreae* and changes in water quality (climate change, sewage outfalls, suspended sediments). In addition to these factors, traditional fishing effort has continued and thus further reduced the adult stock.

The reproductive biology of the native oyster means that reproductive success is closely related to oyster density, and it is thought that the recruitment failure for three consecutive years is due to low fertilisation success as a result of low density.

It was identified that a lack of common agreement amongst those people and organisations (stakeholders) that have an interest in the Chichester Harbour oyster population existed. Not only did the stakeholders disagree on the cause of the oyster population decline but they also had different perceptions of what problems this caused.

Wider environmental and conservation issues are of particular relevance to the Chichester Harbour oyster fishery due to the high level of protection of the site, as outlined in Section 1.0. The conservation objectives of features for which sites were designated must be considered when developing management measures, to ensure no adverse effect. In addition, the native oyster is afforded its own protection under the UK Biodiversity Action Plan (BAP) and fishery management under CHOPI needs to contribute to national BAP and Species Action Plan (SAP) targets.



1.2.2. The stakeholders

The Chichester Harbour oyster population has a diverse range of values:

- Economic – it is an exploitable fisheries resource providing a financial benefit to the local fishing industry; fishermen, fish merchants, fish processors, fish exporters and the National/International Food Industry; food export and food outlets and it also carries a tourism value;
- Social – Chichester Harbour is internationally renowned for producing oysters and historically the activity of oyster fishing has played an important role in shaping the natural landscape and commercial development of the harbour. This fishery is of high heritage value and is prominently featured in the local museums and provides a sense of identity amongst the local population;
- Environmental – the native oysters and native oyster beds are on the OSPAR list of threatened and/or declining species and habitats, and are a listed species under the UK Biodiversity Action Plan (BAP).

A diversity of stakeholders emanates from these diverse values of the native oyster population within the harbour including: the fishing industry; fishery and conservation managers (Sussex and Southern IFCAs, Environment Agency, Natural England); the harbour conservancy and the local peoples heritage, tourist and conservation authorities.

Stakeholder	Perception of the problem	Interest
Fishing Industry	<ul style="list-style-type: none"> • Reduced Catch Per Unit Effort (CPUE) • Loss of earnings 	<ul style="list-style-type: none"> • Financial profit • Income security • Heritage, family tradition to pass on their vocation to the next generation
Inshore Fisheries and Conservation Authorities IFCA (Sussex IFCA and Southern IFCA)	<ul style="list-style-type: none"> • Unsustainable fisheries resource continuing to be exploited • Poor conservation of an internationally recognized threatened/declining species 	Duty to manage inshore fisheries in a sustainable manner, for the target species and the wider marine environment

Stakeholder	Perception of the problem	Interest
Chichester Harbour Conservancy	<ul style="list-style-type: none"> • Loss of heritage, social benefits and tourism associated with the traditional oyster fishery • Poor conservation of an internationally recognized threatened/declining species 	Duty to conserve, maintain and improve Chichester Harbour for recreation and leisure, nature conservation and natural beauty
Natural England	Poor conservation of an internationally recognized threatened/declining species	UK government advisor on the natural environment with a responsibility for inshore marine nature conservation advice

Table 2. The stakeholders, their perception of the problem and their interest in the Chichester Harbour oyster population

1.2.3. The participative approach in management

The Annual Chichester Harbour Oyster Fishery meetings (attended by representatives of all stakeholder groups outlined in Section 2.2) highlighted the decline in the oyster fishery and looked towards the inshore fishery managers for a solution. However, after several meetings with no tangible outcomes it was apparent that the managers (Sussex IFCA) could not find the solution to the range of the stakeholder's perceptions of the problem. Thus, in February 2010 the Chichester Harbour Oyster Partnership Initiative (CHOPI) was created, working on the principle of 'Community of Practice'; whereby groups of people share a concern or a passion for something they do (for example an interaction with the Chichester Harbour Oyster population) and learn how to do it better as they interact regularly (Wenger, 2006).

Through this participatory approach the stakeholders became unified as CHOPI members. The stakeholders began to understand each other's perceptions of the problem and in doing so the members became more accommodating towards finding a solution to not only their own perception of the problem but each other's perceptions. The outcome was that the 'problem' was simplified to 'the decline in the Chichester Harbour oyster population' and the desired outcome 'to revive the oyster population in Chichester Harbour'.

The stages in which the Chichester Harbour Oyster Partnership Initiative (CHOPI) has worked can be understood in the context of the trust building loop (Huxham and Vangan, 2004 – see Figure 1).



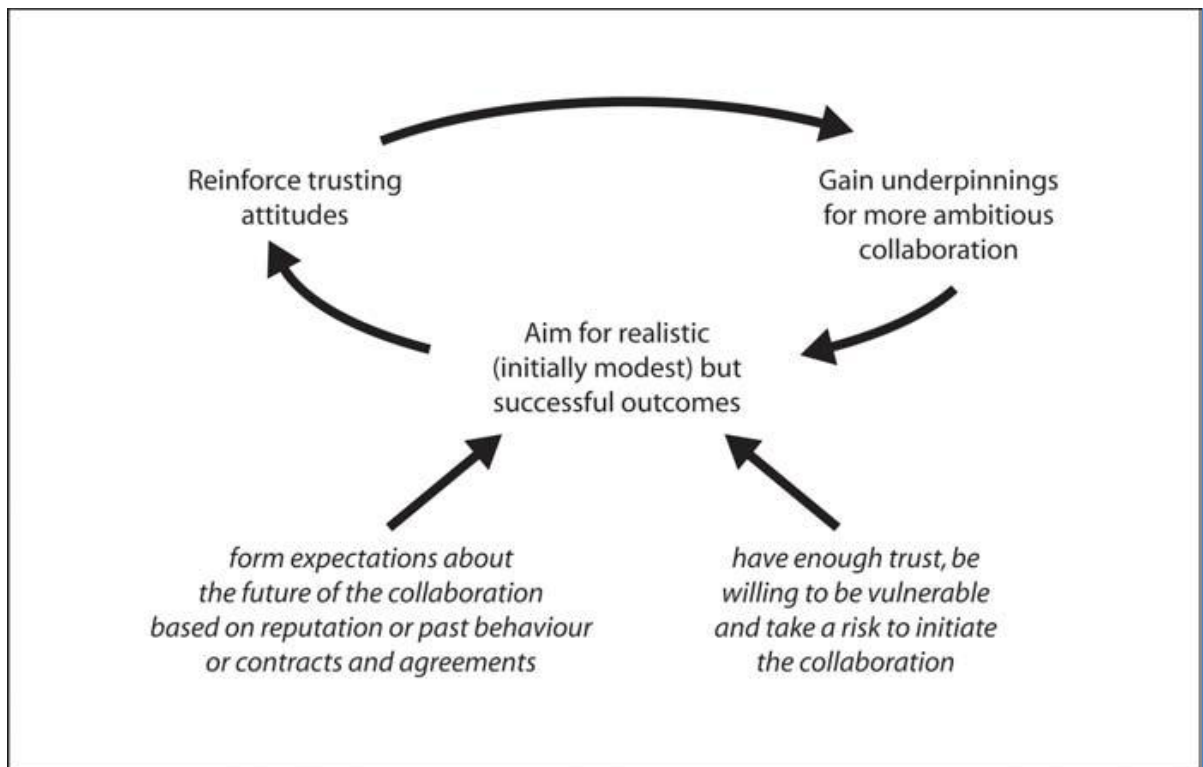


Figure 1. The Trust Building Loop (Huxham and Vangan, 2004)

The emergent trust which developed enabled the stakeholders to work together on potential practical solutions to the decline in the oyster stock. The most widely supported idea was to relay some healthy, sexually mature oysters in high density patches within the Harbour waters, to boost recruitment potential and hopefully kick-start wider repopulation of the Harbour. This concept was generated from the local fishing sector and their historic activities of relaying small oysters for on-growing then harvesting and subsequent observations of wider population peaks. The initiative required financing and all of the primary stakeholders contributed (the Fishing Industry, Sussex IFCA, Chichester Harbour Conservancy and Natural England).

Subsequently, the partnership reached out and gained support from scientists at Southampton NOC and CEFAS as well as the local Environmental Health teams (Chichester District Council and Havant Borough Council). In addition, a voluntary agreement took place amongst the fishing industry to not fish in the broodstock areas. Three broodstock areas were populated during 2010-2011 oyster season and early indications from the monitoring undertaken by the Southampton NOC indicates that successful breeding is taking place.

1.2.4. Management plan development with stakeholder's

CHOPI members wished to further develop the initiative and reached the conclusion that for this to occur a structured fisheries management plan was required. Options for the management plan were developed independently using the following framework:

- description of the fishery;
- investigation of jurisdiction;
- assessment of the objectives of fishery management;
- investigation of operational management;
- review of previous research and stock assessments;
- review of monitoring control and surveillance;
- consultation with the stakeholders, and
- reach an understanding about the post-harvest sectors and advise how, when and who will review the plan.

Importantly, the CHOPI members agreed a set of overarching management principles which provided managers, fishermen and other stakeholders with a foundation that management measures could be measured against. Such principles act to ensure that future management remains focused on the long-term objectives of the CHOPI group and the management of the fishery. The management principles agreed effectively enshrine the ecosystem based approach to fishery management in the workings of the group:

1. The fishery will be managed to promote the long-term sustainability of the *Ostrea edulis* population in Chichester Harbour
2. The fishery will be managed in a manner that will promote the conservation objectives of the Solent European Marine Site and consider the wider environment
3. The fishery will be managed to maximise the economic benefit to participating fishermen and the shellfish industry

A set of management objectives were also developed, based on the ecosystem approach and tailored to local issues, which are essential for developing decisive and meaningful management measures. A review of best practice from other UK oyster fisheries and discussions with fisheries managers and fishermen conducted by the independent management plan contractor produced a suite of possible management measures that could be adopted across a variety of management needs.

The potential management options for statutory and voluntary measures for native oyster management in Chichester Harbour outlined in the management plan should be considered as a toolkit which can be added to by the CHOPI group as the management of the oyster fishery develops and new pressures and opportunities arise. Figure 2 summarises the adaptive management approach used. The flexibility of such an approach allows management to readily react to arising issues and opportunities such as those identified through concurrent monitoring work. For details on the management options proposed in the plan refer to Appendix I.

The CHOPI members considered the management options that were developed to decide upon which to adopt through dialogue and collective agreements. This 'co-management' was possible because the management plan was owned by the CHOPI group. A Terms of Reference was



also developed for the group to clarify and record the agreed desired outcomes, approach, membership and finance (Appendix II).

Fisheries co-management is defined as the sharing of responsibility and authority between the government and the community of local fishers to manage a fishery (Pomeroy and Williams, 1994). This co-management approach only became possible due to the trust that was built through the participative process. This type of approach is primarily built on trust and is therefore fragile and resource intensive to establish, but there are multiple advantages including:

- increased respect and understanding of each other's interest and perceptions;
- an increase in cooperation to accommodate others interests;
- cross stakeholder support;
- good compliance with any management measures that are applied, and
- fulfilment of conservation objectives.

Due to the diverse interests of the stakeholders involved in this situation, it is likely that only a soft systems approach (Checkland, 1981) could have led to a successful outcome. A process whereby gradual trust building can identify the common interest and a suitable, united approach can be developed.



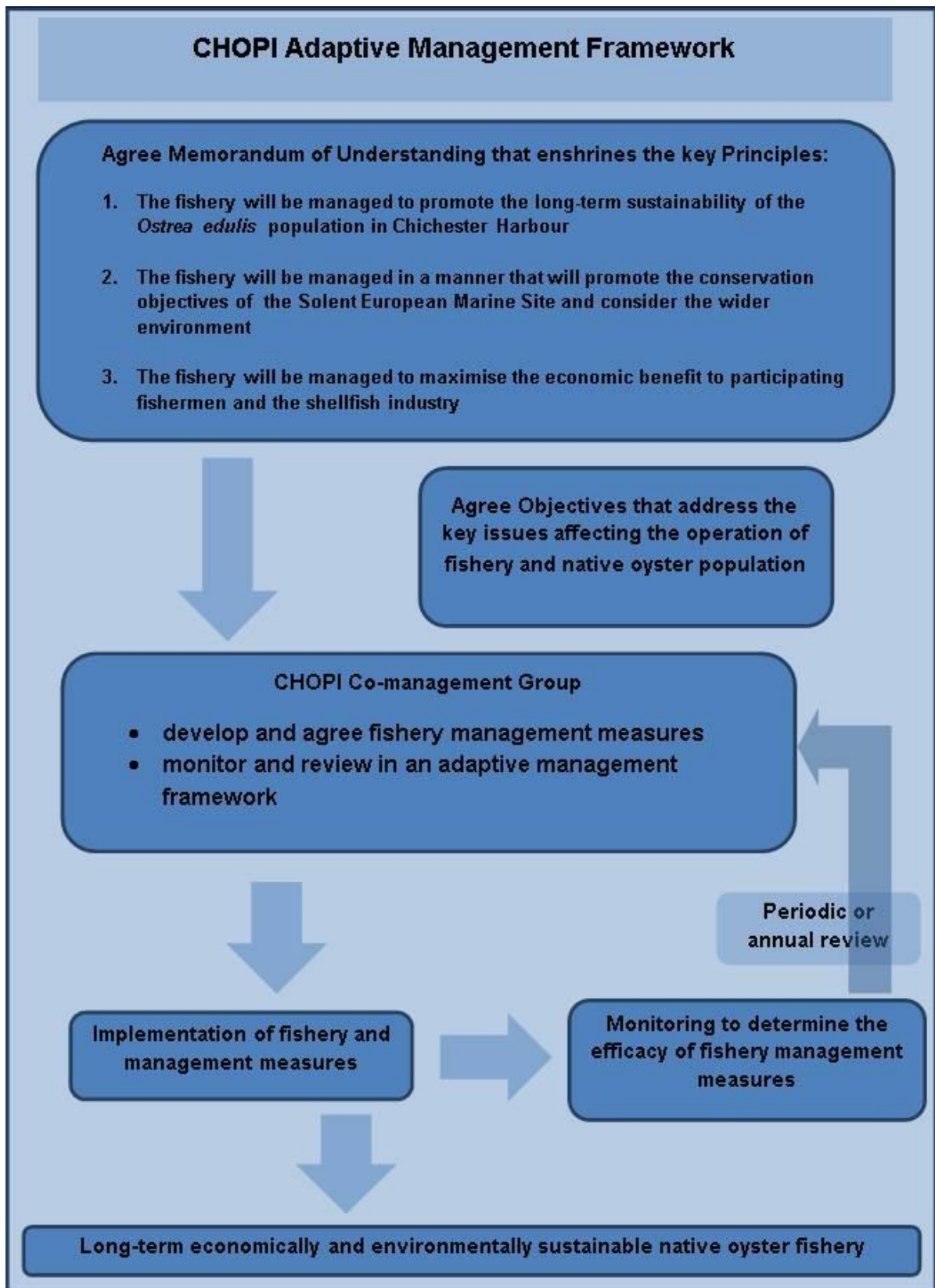


Figure 2. Proposed adaptive management framework for Chichester Harbour native oyster fishery

1.3. CHOPI management plan and stakeholder group utilisation for European Marine Site (EMS) work

1.3.1. The government's revised approach to fisheries within EMS

The government has revised its approach to commercial fisheries management within European Marine Sites (EMS) in English inshore waters, to conserve important habitats and species in line with our obligations under the EU Habitats and Birds Directives. Refer to Appendix III for the governments revised approach policy paper.

The revised approach is being applied on a risk-prioritised basis, with those fishing activities deemed to present a red high risk to sensitive protected features within EMS requiring regulatory management measures to be in place by December 2013. The impact of fisheries on other features at lower risk of being damaged (amber and green risks) must be assessed by 2016 and management measures introduced as required.

As outlined in Section 1.0, Chichester Harbour is encompassed within a SAC and a SPA, both of which are types of EMS, and therefore needs to be considered within the revised approach outlined. As the lead Authority in inshore fisheries management IFCAs are the primary delivery body within six nautical miles.

1.3.2. EMS work and CHOPI

The CHOPI group established to tackle oyster management within the harbour has provided additional value through this current EMS management work stream. The group has been valuable as a source of pre-consultation information gathering and dissemination on the revised approach and the red high risk features with the harbour identified. Seagrass beds in the SAC have been categorised as a sensitive red risk feature and incompatible with towed (demersal) fishing, dredges (towed and other), intertidal handwork and bait collection.

The CHOPI commercial fishermen members represent the key local towed gear operators within the harbour and also contain hand gathering representatives, therefore providing a valuable source of contact with some of those potentially affected within the industry and easy access for early consultation on EMS red risks work within the harbour.

The CHOPI group will also be valuable for future amber and green risks appropriate assessments where Sussex IFCA will need to work in partnership with the fishing industry on the collection of evidence and formulation of potential management measures if needed.



The trust already built through the participative process when establishing the CHOPI group is essential for facilitating the collective management agreements and collection of evidence in partnership needed for the pending amber and green risks EMS work. The group has already been used for pre-consultation on amber and green risks work, providing key members of the local community with background information on this future work at an early stage.

The effect of oyster dredging on subtidal habitats within Chichester Harbour has been identified as a priority amber risk to assess in the next stage of EMS work, due to the increase in the level of this activity within the harbour in recent years and potential impact on features. As the key local representatives from this fishery are members of CHOPI, this established group will provide an important focus for future evidence and management discussions.

Furthermore, the management plan developed in partnership through the CHOPI group could be used to inform the EMS amber risks work and future associated management proposals. The CHOPI management plan recommendations will be considered through the process and some of the proposals the group wishes to adopt could fulfil some of IFCA's requirements under the EMS revised approach. The EMS research and management needed could work to strengthen the CHOPI management needs identified and support their realisation.

The importance of working in partnership on management has clearly been illustrated through the CHOPI group, both for the intended work for which it was formed and as a tool for future statutory MPA management work within the area.



II. Parc Naturel Marin d'Iroise

2.1. A participatory tool by definition

The Parc Naturel Marin (PNM, marine nature park) is a new tool in France for managing the sea and protected natural areas. Established by a law of 14 April 2006, the Parc naturel marin enhances a broad range of protection tools. Knowledge of the environment, ecosystem protection and sustainable development of sea-related activities are the stated aims. The French MPA Agency (Agence des aires marines protégées), a national public organisation dedicated to marine environment protection, provides the Parks with financial and human resources. The Agency is placed under the authority of the French Ministry for Ecology, Sustainable Development and Energy (Ministère de l'Écologie, du Développement durable et de l'Énergie).

French Parcs naturels marins are governed by a management board on which all the Park's stakeholders are represented. This board implements the management focuses via various actions such as developing the management scheme, the annual action plan, and the annual activity report, etc.



Figures 3, 4 and 5. PNMs in the PANACHE area and study mission for a PNM



Figure 6. Boundary of the Parc naturel marin d'Iroise and location. Source: Parc naturel marin d'Iroise

The Parc naturel marin d'Iroise (Iroise marine nature park), established in 2007, is the first of its kind, and covers an area of 3,500 km² in the Iroise sea. The Park's area is at the confluence of the Channel and the Atlantic, between two islands: Sein and Ouessant; it is also distinctive as it features some of the most significant swells and tidal currents in Europe. In addition to objectives shared with other PNMs or marine protected areas, local objectives have been set, which correspond to the economic and cultural wealth of the Iroise Sea. The Iroise features a marine habitat propitious to abundance fauna and flora such as algae, ormers, and spiny lobster.

2.2. Cantonnement de pêche (professional fishing reserve) for spiny lobster

One of the emblematic, associated and high-value fishery stocks in the Parc naturel marin d'Iroise is the common spiny lobster (*Palinurus elephas*).

"At the end of the '90s, a reduction or even a total decline in the resource (of common spiny lobster) was seen, due in particular to insufficient regulation of the fishing effort (Latrouite et Lazure, 2005). Therefore, certain measures such as increasing the minimum cephalothorax length for catches (from 9.5cm to 11cm) or establishing professional fishing reserves (*cantonnements de pêche*) were introduced."

In 2007, professional fishermen decided to create a *cantonnement de pêche* for the common spiny lobster in the Chaussée de Sein and the Parc naturel marin d'Iroise is responsible for monitoring its effectiveness.

850

metric tons of spiny lobster off-loaded yearly in 1950 in France.

15

metric tons of spiny lobster off-loaded yearly in 2010 in France, of which half in the Iroise Sea.



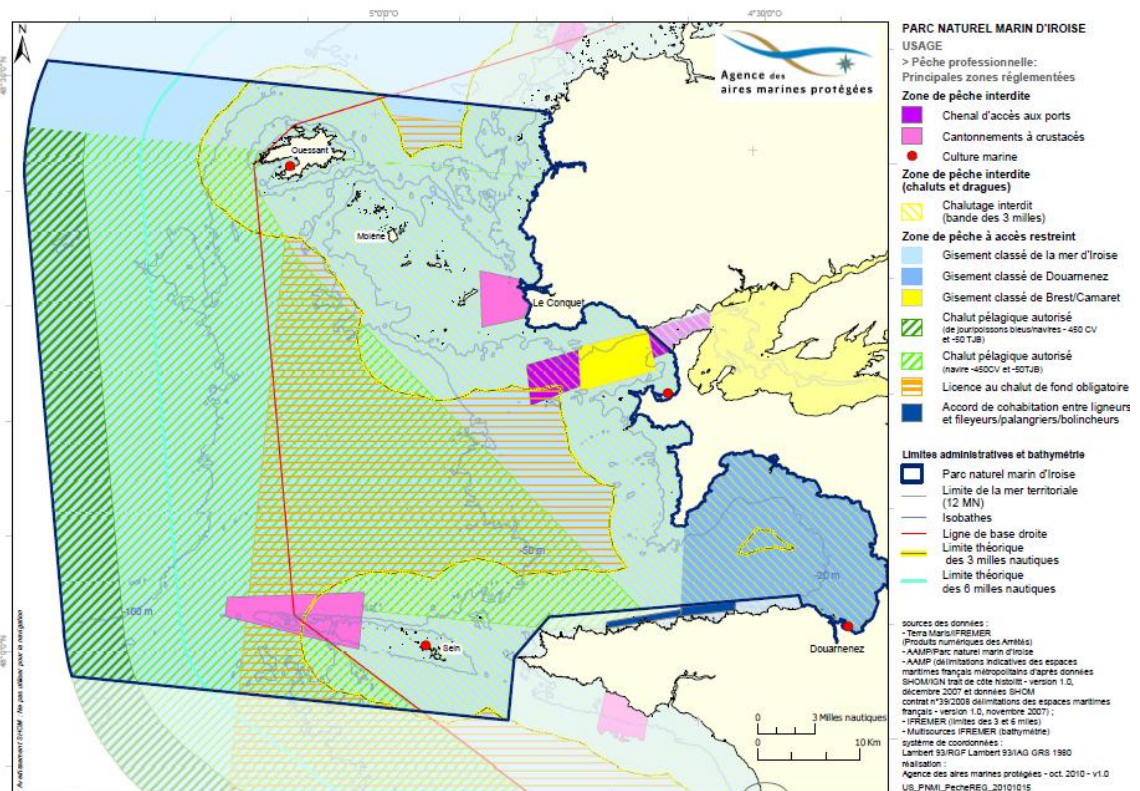


Figure 7. Main regulated professional fishing zones in the Parc naturel marin d'Iroise, with the dark pink zone in the south for the spiny lobster reserve. Source: Parc naturel marin d'Iroise

Since 2009, the Park, Ifremer and a fisherman from Sein having been carrying out experimental fishing with a net and marking the lobsters caught. “This action is in line with one of the Park’s goals: support maritime activities on the islands and the sustainable harvesting of fishery resources.”



Photographs 1 and 2
 Credits: A. Bonneron /
 Agence des aires
 marines protégées

This spiny lobster reserve aims to assess the abundance of lobsters in this area and the potential for restoring a harvestable stock. The Park does an average of four experimental fishing trips a year (three in 2013) to mark 20 to 30 individuals. The Park seeks to determine the efficiency of pots for catching spiny lobsters. Currently, this method indeed appears to be less effective than nets, due to the uncertain abundance of the resource. During 2012, discussions were initiated to test basket traps. They were launched following an increase in the abundance of lobsters in the reserve, but also following the development of new types of fishing gear.

Numerous campaigns were carried out between 2009 and 2013 (latest activity report of the Park), and “in the light of these first

results, the abundance in the reserve [...] is on the rise and the values reached are considered high. These results confirm the appropriateness of its location and its surface area. This reserve therefore appears to be adapted to the species and the findings should lead to proposals of new management measures for the entire fleet targeting it.

These first results need to be confirmed and work done in partnership with Ifremer and the professional fishermen must be continued.”

During 2012 and 2013, the Park’s management board approved “the use of electronic marking (acoustic marking or tracking to emit an identifiable sound) to monitor the displacements and movements of the lobsters inside and outside the reserve.” This provides information about the displacements of the individuals marked, to find out whether or not the lobsters go out of the reserve.

2.3. Green ormer label

Just like the spiny lobster, the green ormer (*Haliotis tuberculata*) is a flag species in the Parc naturel marin d'Iroise. It is also a high-value species, harvested by a small number of professionals but also by a group of experienced recreational on-shore fishing enthusiasts. “Green ormer fishing in Brittany is a real maritime tradition. During a study carried out in 2009-2010 within the Park’s boundaries [...], 30% of recreational fishermen surveyed said they targeted the ormer during the winter period. As an example, on 31 January 2010, 102 on-shore fishermen were seen on the rocky shores of the Molène islands, a very popular area for ormer catching. The tidal coefficient was then 111” (Courtel, 2010). “The highly-regulated opening of this fishing would appear to have eliminated regular poaching that was done before 1994” (Malgrange, 2009).

In its management scheme, the Parc naturel marin d'Iroise includes a double objective in respect of emblematic species, which include the green ormer. The first is to promote good fishing practices to professionals, and the second is to better identify and sell the produced fished. Since 2009, an initiative has been developed to promote Molène and its green ormers.

In 2008, the Parc naturel marin d'Iroise, in partnership with Normapêche (Bretagne Qualité Mer), the departmental fisheries committee of Finistère and the Brest fish market, created a “Molène ormer” quality label. This label guarantees the quality of the product and compliance with measures specific to the good health of the stock. It is made visible by a label attached to the animal. By joining the initiative, professional fishermen undertake to observe the quotas, the fishing period and the minimum catch size “inherent in good management of the resource”. The fishery itself only concerns two fishermen, who partly earn their living



Credit: F. Quéau / Agence des aires marines protégées

from this resource, and is strictly regulated (minimum size, quota and fishing period set by prefectural by-law). This is nonetheless the main product fished in the islands with a production of over two metric tons in 2009.

“In a second stage, and to promote the initiative to consumers, the Parc naturel marin d'Iroise prepared a recipe card with its partners providing biological information about the ormer, which is a little known gastropod, and stating the aims of the promotion. A recipe from a restaurant owner in Brest is also included to inspire potential buyers.”

The Park would like to be able to expand this labelling initiative to other species. Talks are therefore underway with professionals and the partner organisations to extend this programme to other species such as the monkfish, the pollack, the lobster or the spiny lobster.

For fish species, which do not confine themselves to a distribution range within the Park, this is a real challenge compared to the green ormer.

“Eventually, if the distribution of the label goes well, consumers in Brittany but also in regions further away should be able to associate produce from the Iroise Sea with a quality guarantee and the assurance of compliance with the fundamental principles of sustainable fishing.”

L'ormeau de Molène

Recette au verso

Un peu de biologie
L'ormeau vit dans les zones de balancement des marées. Glouton, il peut consommer jusqu'à 10 à 20% de son propre poids d'algues en une journée. La croissance de l'ormeau est lente. Il lui faut environ 7 ans pour atteindre la taille minimale de capture de 9 cm. Il peut vivre au moins 15 ans. L'ormeau se reproduit pour la première fois à une taille de 4 à 5 cm. La période de reproduction s'étend de mai à septembre.

Pour une pêche durable

Le label "Ormeaux de Molène" valorise une pêche responsable et soutient l'activité de pêche sur les îles. Cette démarche est issue d'un partenariat entre le Parc naturel marin d'Iroise, le comité local des pêches maritimes du Nord Finistère, la criée de Brest et Normapêche Bretagne.

Elle met en avant :

- l'exploitation stricte et durable de la pêche (taille minimale de 9 cm, quota, observation de l'écosystème) ;
- l'origine (lieu de pêche indiqué sur la « bague ») ;
- un débarquement sous criée ;
- un produit de qualité.

La pêche professionnelle de l'ormeau
L'ormeau se pêche en plongée de septembre à mars au milieu des champs de laminaires qui tapissent l'archipel de Molène. Chaque ormeau doit être marqué au moyen d'une bague inviolable.

Pêche professionnelle en plongée

Ormeaux sauvages labellisés

Figure 8. Fiche de présentation de l'ormeau de Molène. Crédit : Parc naturel marin d'Iroise

III. PISCES project

3.1. Introduction

There is a general perception among marine stakeholders that they lack coherent and transparent processes through which they can have a meaningful input to policy and management. Stakeholders also feel participation processes need to be integrated and rationalised to reduce the competing and growing demands on their time (Roxburgh and Dodds, 2012)

This is the starting point for developing best practice for stakeholder involvement in the EU Life-co-financed project PISCES (Partnerships Involving Stakeholders in the Celtic Sea Ecosystem, 2009-2012 (Roxburgh and Dodds, 2012)). The focus of the project was to enable stakeholders to develop and formulate their perceptions about the implementation of the Marine Strategy Framework Directive (MSFD), however, much of the outputs is as valid for the process towards an ecologically coherent and well-managed network of marine protected areas in the Channel area and elsewhere.

3.2. History of the project

The three-year PISCES project¹, led by WWF-UK has brought together representatives from the major sectors that operate in the Celtic Sea and western Channel. In view of the ever increasing demand for space and resources in this sea area, stakeholders from the region agreed to find ways to manage their activities more sustainably. An improved communication and coordination of activities was seen as vital to reduce stakeholder conflicts and also the threat to the marine environment.

PISCES stakeholders believe that the MSFD represents an opportunity for a broader rethink about participation in marine policy and management. They produced a guide which explores options and opportunities for stakeholder participation in marine management processes.

PISCES has been the first opportunity for people who use, work, live by or enjoy the Celtic Sea to translate policy into practical recommendations. The approach has helped to increase knowledge, build trust between sectors and create a powerful voice for Celtic Sea stakeholders. A follow-up



Figure 9. The PISCES project area

¹ http://www.projectpisc.es/about_us/

project (2013-2016) will further explore practical tools and approaches to help achieve good environmental status in the wider Celtic Sea region.

3.3. The stakeholders

A core group of 25-30 stakeholders from England, Wales, Ireland, France and Spain collaborated on the development of the PISCES guidelines for delivering an ecosystem approach to marine management. Overall, 46 participants contributed to one or several of a series of 5 regional workshops.

The stakeholders involved represented renewable energy producers, commercial fisheries, mariculture, shipping, ports, offshore infrastructure (cable laying etc), coastal tourism and recreation, marine aggregates, as well as environmental statutory agencies.

Additional information was collected through literature research, interviews, questionnaires and other sources. An advisory group of experts and additional comments further helped the drafting of the guidelines.

3.4. How to involve stakeholders

Traditionally, stakeholders have several, usually high-level options, of active participation in management processes:

- Direct contact to relevant government departments and agencies (can be very individual)
- Participation in national government meetings (national/regional representation)
- Attendance as “observers“ in international meetings (requires international observer status with the respective organization).
- Conferences and workshops.

In order to lower the threshold for stakeholder participation, a more proactive strategy is required. Such a strategy identifies and formalises the ‘entry points’ for stakeholder input, clarifies timings and detail of required information (e.g. technical solutions, socioeconomic data). It is important to identify the roles, responsibilities and the approach to participation at the beginning of the process, in particular how the stakeholder opinion will be taken account of in the overall decision-making. In order to avoid duplication and too high demands on the time of the stakeholders, an integration of stakeholder processes for other policy areas, which may be proceeding in tandem, often with the same stakeholders.

PISCES stakeholders recommend to set up a regional, transnational, multi-sector forum to foster greater communication, cohesion and integration across borders and sectors. Such a forum could form an integral part of the implementation MSFD strategy and contribute to the integration of the various conservation actions in the area, e.g. the establishment of a network of well-managed MPAs.



A range of participation techniques can be successful on a case-by-case basis, e.g. geographic or sector-based working groups, workshops, web portals, one-to-one meetings, exhibitions and drop-in sessions, and stakeholder meetings.

3.4.1. Recommendations for stakeholders²

- Maximize participation opportunities – don't assume opportunities will automatically be offered.
- Actively participate in the process of identifying and evaluating measures
- Advocate and support new stakeholder participation mechanisms (e.g. national and regional-seas forums).
- Seek collaboration partners to identify and implement voluntary measures. Encourage others to do the same and communicate benefits.
- Share information on technological advances and initiatives (e.g. newsletters, websites, stakeholder forums).
- Seek opportunities associated with the MSFD (e.g. undertaking research and monitoring, diversifying activities, obtaining finance).

3.4.2. Recommendations for governments

- Implement marine spatial planning – to provide the overarching framework for integrated management of human activities
- Engage proactively with stakeholders and involve them throughout the implementation process (not just consultation)
- Develop clear and transparent stakeholder engagement strategies
- Use stakeholder knowledge and experience during the identification and evaluation of measures
- Advocate and support the development of e.g. local, national and regional-seas forums. • support and encourage voluntary measures that address environmental issues and consider ecosystem services (e.g. through funding, incentives, partnershipworking and education), eventually include directly into the statutory programs of measures.
- Support regional-seas cooperation (e.g. by supporting transboundary cooperation initiatives and projects).

² slightly abbreviated/reformulated by the author to match PANACHE needs



IV. Invest in Fish South West

4.1. Introduction

As the first project of its kind in Europe, Invest in Fish South West set a precedent for multistakeholder engagement in fisheries management. It provided a first test case for future similar schemes in the UK and elsewhere in Europe, and for the Regional Advisory Councils (RACs).

The focus for Invest in Fish South West was to build consensus among the fishing community of the region on the objective of rebuilding and maintenance of sustainable fish stocks, and the necessary steps to get there.

4.2. History and scope of the project

The starting point for the Invest in Fish South West project (IIFSW) was the recognition that stakeholder groups were traditionally excluded in European and British fisheries management (Invest in Fish South West, 2007). This led stakeholders to question the legitimacy of management decisions taken, resulting in high levels of non-compliance to fisheries regulation.

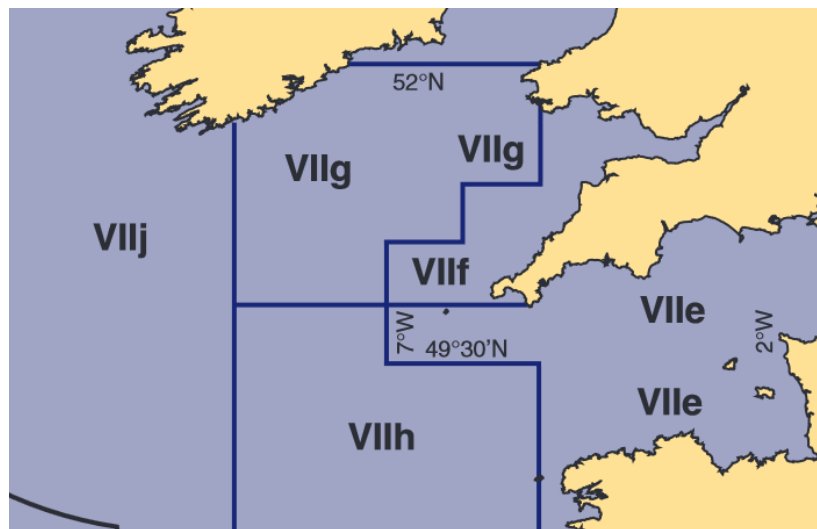


Figure 10. The InvestInFish South West project area (Source: www.nwwrac.org)

Therefore, Invest in Fish South West aimed to give stakeholders an active role in making fisheries more sustainable by facilitating a multisector expression of well-founded opinion. Stemming from the WWF-UK report “Choose or Lose” (MacGarvin and Jones, 2000), a founding partnership of WWF-UK, the National Federation of Fishermen’s Organisations (NFFO), and Marks & Spencer mobilised to turn ideas into action. They built a momentum that brought others to the table and in 2004 the SW CoBAS project (Cost-Benefit Analysis of Stock recovery), soon after renamed the Invest in Fish South West project, was launched.

A full scale bioeconomic model was developed to enable the multi-stakeholder group to explore potential economic and environmental impacts of different policy options for fisheries. This helped find agreement among stakeholders on a set of recommendations to inform policy makers on jointly agreed measures in support of a longterm sustainable industry. In the end, a fiscal case should be delivered, justifying government investment in the re-structuring of the UK fishing industry.

4.3. The stakeholder actions

The partnership centred on a roundtable deliberation forum, the steering group, to help build mutual understanding among the commercial and recreational sea fishing interests in the south-west, to learn about the perspectives and preferences of all sectors, to jointly consider options that might deal with problems identified, and to reach common recommendations for policy makers to consider. The project Steering Group was made up of representatives from the full supply chain for fish (sea to plate), including: the fishing industry, environmental NGOs, fish processors, recreational anglers, retailers, and even restaurateurs.

In the first phase of the project, the core liFSW project team and the steering group, supported by an advisory panel, generated background knowledge, set up the basic bioeconomic model and created options for joint values. The preferred form of communication was small group meetings and one-to-one interviews. This phase was also important for building credibility and trust.

In the succeeding phase, Steering Group members met with their constituencies to record each sector's key values. From this a common "value tree" was generated. Information validation was an important action, including ground-truthing data in the model with some stakeholder groups. Nearly 100 commercial fishermen and 500 recreational sea anglers were contacted for their views on ways to improve fisheries management in the south-west. Combined with other stakeholder views over 30 different ideas then made up a Master Options List. The modeling of the interaction of various management measures led to the final options package, designed to optimize complementary measures in view of reaching the joint values. Another consultation process made sure that the major interest groups, including the public, understood the proposed package and its benefits and limitations. A final two-day meeting settled the final recommendations on the favoured options for securing sustainable fisheries in the south-west.

4.4. Lessons learnt

4.4.1. Stakeholder involvement

- Diversity of stakeholder composition is an asset not a burden.
- A formal agreement amongst all parties was helpful to ensure continued institutional commitment to participate, as well as continuity of individual representatives. Personal relationship building had a strong positive impact on developing a constructive working climate.
- Mutual respect, the prospect of reaching voluntary agreements and a balance of rights and duties were important conditions for sustaining cooperation and a constructive atmosphere.
- Equality. each partner at the liFSW Steering Group was an equal participant, regardless of any financial or other contributions. This was outlined in a formal Steering Group Agreement (SGA). This was vital to the ability of the Group to reach consensus. No difference was made

for representatives of groups of stakeholders, and individual companies, respectively.

- The mandate and the boundaries of what is negotiable among partners must be clearly defined. It is important to recognise that individual partners may have multiple tactics to achieve their organisational or sector aims, and this should be acknowledged upfront.

4.4.2. Technical contributions

- Technical tools. The inclusion of scientific as well as decision analysis tools was very helpful in promoting a rational, effective and mutually responsive process of deliberation.
- Technical complexity such as through scientific modeling puts a burden on all steering group members - this must be outweighed against the benefit of exact and complex management options.
- Too many technical reports can lead to information overload and frustration - an alternative option may be to create a supportive learning environment for stakeholders

4.4.3. Process facilitation and consultation tools

- Public opinion and preferences was included via a professional public opinion firm. It was an important driver for identifying and evaluating management options, and was a strong motivator for reaching consensus.
- Accessible and trusted professional facilitation is helpful not only in providing a structured process for dialogue (design) but also in day-to-day conflict management.
- Apart from formal exchange, personal and collective experiences (trips out to sea, visits to processing plants, etc.) contributed to the group's sense of shared identity
- Information management is a key task and requires adequate time and experienced personnel.

V. Another good practice of involvement: Californian MLPA Initiative

5.1. Introduction

An effective and transparent process design which optimized contributions from stakeholders, scientists, and policy makers has been highlighted as one of six success factors for the design and implementation of the statewide network of MPAs in California (Fox et al., 2013b). Strong emphasis was placed on collecting and utilizing local knowledge to inform MPA design. This information was made available through the development of an online decision support tool, MarineMap, which enabled stakeholders, scientists, and decision makers to contribute to the design and evaluation of MPA proposals (Gleason et al., 2013; Merrifield et al., 2013).

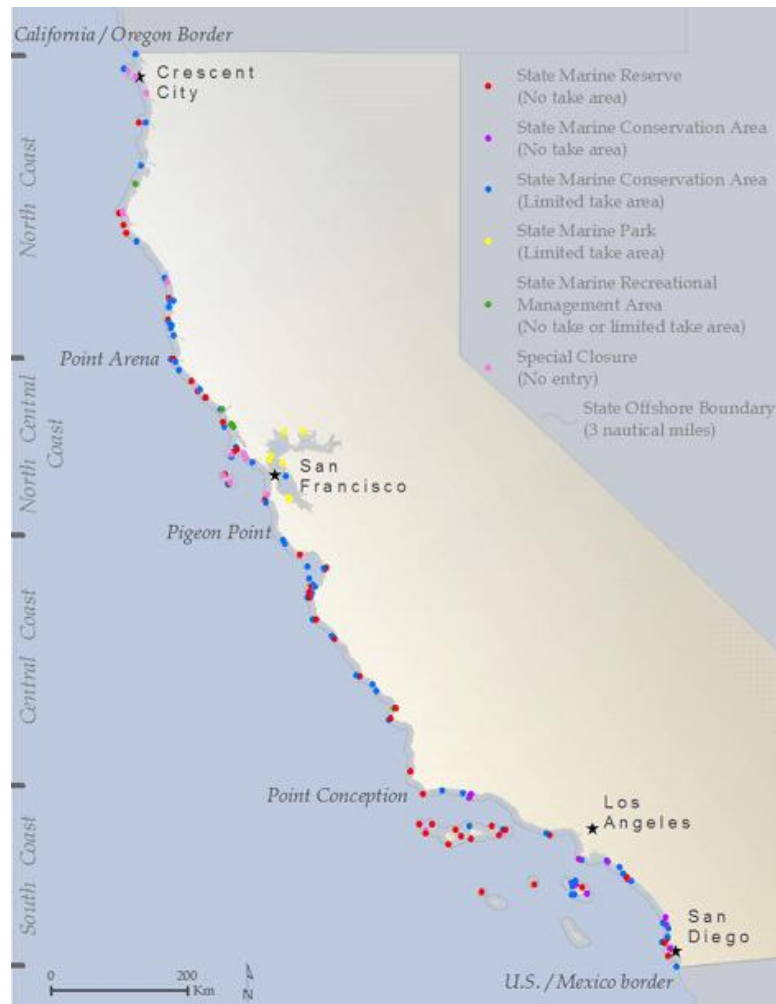


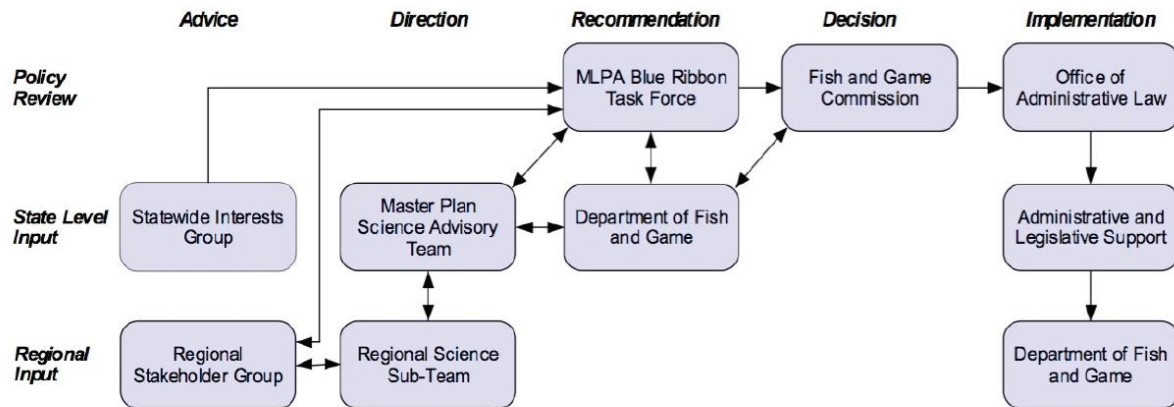
Figure 11. The California network of MPAs (Gleason et al., 2013).

The success of the MPA process in California demonstrates the necessity and opportunities to engage civil society at a broad scale from early on in the process (Sayce et al., 2013). Appropriate scaling in a regionally staged approach to network planning allowed for stepwise optimization of the stakeholder process design to fit both regional differences and lessons learned over time.

5.2. History

The Marine Life Protection Act (MLPA) is a California state law enacted in 1999 that mandates the redesign of California's existing MPAs to create a statewide network that achieves six ecosystem-focused goals (Gleason et al., 2013; Kirilin et al., 2013). In 2011, the redesigned network has comprised 124 MPAs, covering 16.0% of state waters within 3 nm from the coast and outside of San Francisco Bay, including 9.4% of state waters in "no-take" areas, all designed pursuant to science guidelines intended to achieve network effects among the MPAs along the entire California coast (Kirilin et al., 2013). Implementation is yet to be completed.

The network planning process took nearly seven years and was facilitated through the MLPA Initiative, a public-private partnership formed in 2004, realised through memoranda of understanding (MOUs) (Kirilin et al., 2013). Here, two state agencies and a privately-funded foundation collaborated, establishing the objectives for the planning process, setting out timelines for deliverables, and agreeing on the roles and responsibilities for key bodies (see Fig. 2). A volunteer so-called Blue-Ribbon Task Force and a Master Plan Science Advisory Team (SAT) significantly helped in guiding the planning process. In addition, there was a state-wide Stakeholder Interests Group (SIG) which provided input throughout the process (Kirilin et al., 2013). The decision-finding was supported by a comprehensive mapping tool (Merrifield et al., 2013) and socioeconomic modelling (White et al., 2013).



Arrows indicate the flow of information, recommendations, and policy direction.

Note: Input is solicited from the interested public and stakeholders at each step, until adoption of regulations by the Commission.

Figure 12. The role of actors in the MLPA Initiative (Source: Master Plan 2008)

In 2008, a Master Plan for Marine Protected Areas (Master Plan³) was adopted after public consultation. The document was designed to guide the adoption and implementation process of the revised network of MPAs in California. marine protected areas (MPAs) and includes a "Strategy for Stakeholder and Interested Public Participation" (Annex D). It was kept as a "living document" which was supplemented with regional updates after completion of the planning phase.

³ <http://www.dfg.ca.gov/marine/mpa/masterplan.asp>

To design a statewide network, the Initiative divided California's 1770 km coastline into five "study regions" for sequential planning, each with a separate "regional stakeholder group" (RSG) consisting of fishermen, conservationists, recreational users, native Americans, and others with intimate knowledge of the area, who were tasked with proposing a preferred alternative MPA network design (Fox et al., 2013c). The MPLA Initiative supported these regional groups of stakeholders in crafting MPA network proposals for consideration by the MLPA Blue Ribbon Task Force (BRTF) and ultimately the California Fish and Game Commission (Kirlin et al., 2013).

Each study region presented a different set of factors that needed to be considered by Initiative staff in designing the overall stakeholder planning process. Furthermore, as planning for each study region was completed, a formal "lessons learned" evaluation was conducted that informed process design in subsequent study regions. Thus, designing a statewide MPA network through regional MPA planning processes presented the opportunity and challenge of adapting the stakeholder process design to both regional differences and lessons learned over time (Fox et al., 2013c).

5.3. Interactions with stakeholders and the public

The MLPA Initiative aimed at realizing a collaborative participation of the wider public, process participants and decision-makers in a multi-dimensional dialogue (Sayce et al., 2013). This substantially broadened the traditional participation opportunities for civil society and required the design and implementation of innovative and unconventional public outreach and engagement strategies to assist local communities share relevant knowledge and data, and provide timely and targeted contributions to MPA planning discussions (Sayce et al., 2013).

5.3.1. Prior to MPA planning

As a first step, before any MPA planning began, the Initiative staff assessed a region's unique characteristics and began to establish a network of key local contacts with access to a wide range of user groups. This fact-finding and relationship building was done primarily via informal individual and group discussion with community leaders. This helped gain insight on local communities, identify key user groups, highlight special circumstances and limitations (e.g., ability to access information), and inform outreach and engagement strategies appropriate for those communities (Sayce et al., 2013).

From the information gained, region-specific outreach and engagement strategies were designed, which focused on building and maintaining relationships, understanding and responding to public needs and concerns, creating formal and informal opportunities for public engagement, reaching underrepresented groups, and developing a comprehensive media strategy. In effect the strategies highlighted the value in relationship building among a diverse public, the power of open and honest multidimensional dialogue, and the advantages of integrating public input and interests into process outcomes. The draft strategies were adapted to public feedback, lessons learned assessments,

community needs, and available resources. This resulted in a MLPA Initiative model for collaborative participation designed to actively engage local communities and members of the general public in multidirectional dialogue (Sayce et al., 2013).

Prior to the nominations for members of the regional stakeholder groups (RSG), and based on the outreach and engagement strategies, an initial series of public workshops or open houses were held. Here, the overall ambition and the initiative were presented to the public and detailed information was provided on formal and informal opportunities for participation and input during the MPA planning process were outlined. Participants were encouraged to provide feedback on the MLPA, the MPA planning process, and their interests in participating and contributing to MPA ideas and proposals (Sayce et al., 2013).

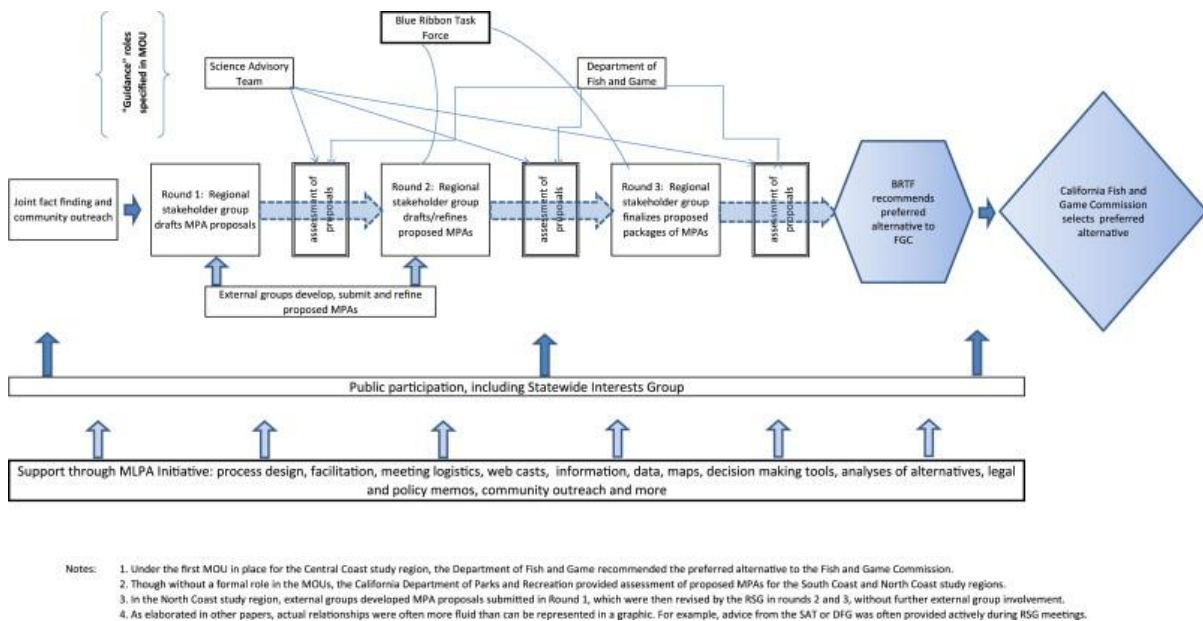


Figure 13. The regional planning processes (Source: Kirlin et al., 2013)

5.3.2. During the planning phase

Regular public meetings in each region invited for stakeholder opinion on MPA development, policy issues, and science questions. Also, direct contact and interaction could be made with Initiative staff, the members of the RSG, science and other advisory teams (Sayce et al., 2013). This RSG-led planning phase lasted from seven to 12 months, which allowed for iterative rounds of MPA proposal development, evaluation, and refinement (Fox et al., 2013c; Kirlin et al., 2013).

Written comments were accepted throughout the process, and all formal public meetings included opportunities for verbal public comment (Sayce et al., 2013). Members of the public could provide input on MPA proposals verbally with Initiative staff and Initiative groups, in written format (hard copy, email, or online comment forms), or via an online mapping tool (Merrifield et al., 2013).

The composition of the RSGs posed particular challenges (Fox et al., 2013c): To convene the RSGs, key selection criteria had to be designed to ensure a balanced distribution of stakeholders and a group

size small enough to allow effective engagement of the members, but large enough to represent the diversity of views and interests of the region (Fox et al., 2013c). This required that not each interest group could be represented on its own. In regions with high population density and many ocean users, RSGs were larger, and to be manageable got a hierarchical structure of primary and alternate members who represented similar interests.

In addition, an overarching balance in the representation of extractive and non-extractive users was sought. Following first negative experiences with unwillingness for compromise, all nominees appointed for the RSGs had to demonstrate a willingness to strive for mutual gains solutions and engage in joint problem solving across interests.

This strategy was fairly successful, except on the south coast which had the largest RSG but nonetheless did not reach a well-balanced composition (Harty, 2010 in Fox et al., 2013c). Where trust and open collaboration were impeded, the format of smaller working groups within the RSGs was used. This eventually led to the proposal of several preferred options from one RSG.

External, public design proposals brought valuable information and new design concepts into the RSG processes and overcame eventual feelings for being excluded from the process.

5.3.3. Opportunities generated by the mapping tool

A participatory decision-making process requires an authoritative data and information source common to all actors. Therefore, to meet the participatory goals of the MLPA Initiative, stakeholders (in the RSG) and the public had to be able to use the same analytical tools as the MLPA Initiative, scientists and governmental agencies.

Rather than relying on a technically demanding GIS, a centralized geodatabase and spatial decision support tool was iteratively developed, that simplified repetitive analytical tasks and increased the distribution of self-service to a wider audience. The resulting web-based system, called MarineMap⁴, thus facilitated collaboration, transparency and efficiency (Merrifield et al., 2013).

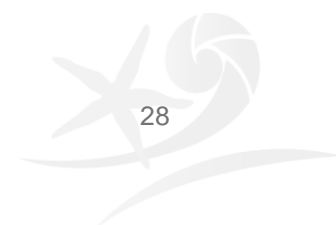
Such Participatory GIS (PGIS) has emerged over the last decade and seeks to bridge the gap between complex facts and optimal choice of spatial options from various perspectives. Webbased map viewers are increasingly being offered to the public as visualization tools in marine planning processes, however usually with limited options to create a user-tailored output.

Therefore, in order to make the step from visualization to user-derived content and option analysis, the Initiative successively created a tool which could be used in various environments, created real-time output and feedback with respect to the design framework, allowed sharing and comparison of options created and therefore enabled the iterative collaborative development of spatial solutions.

The critical elements for a useful spatial decision support tool were found to be:

- a centralized, geographic data base ensures data integrity and version control
- access to remote clients via the web,
- intuitive visualization of those data and concepts,
- real-time analysis of design options and feasibility check,

⁴ <http://marinemap.org> - the succeeding project can be found under <http://www.seasketch.org/>



- easy sharing
- easy use for non-technical stakeholders
- easy export to common formats

Using the bathymetric maps of Google Earth as a baseline layer and web application already known to many users, in combination with the fun of being able to create 3D solutions may have helped to further stimulate participation in the California MPA network planning process (Merrifield et al., 2013). Due to the ease of use and general acceptability of the tool, MarineMap could be used for real-time option analysis during meetings not only of the Regional Stakeholder Groups, but also the Blue Ribbon Task force and ultimately the Fish and Game Commission (Merrifield et al., 2013).

5.3.4. Opportunities generated by socio-economic modelling

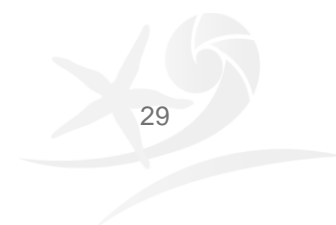
In order to evaluate the economic consequences of spatial decisions in relation to the designation of the MPA network in California already during the planning process, two separate assessment approaches were used (White et al., 2013): One was a static, short-term "worst case" assessment based on inquiries with local fishermen. The other was a dynamic bioeconomic modelling approach, which considered changes in spatial distribution of biomass and catch, based on published literature, modelling of larval connectivity, and a range of possible levels of fishing. It explicitly accounted for fish population dynamics, spillover, fisher movement, and fishery management outside of the MPAs, but was limited to long-term, equilibrium-based results because of a lack of baseline abundance data. Despite some lasting concerns and critiques, in the course of the process, both assessment methods became a desired and accepted part of the MPA network planning (White et al., 2013). Confidential data were presented only in aggregate form and prejudices with respect to the accuracy of modelling results were overcome. However, time and funding constraints prevented to integrate the modelling as an additional tool into the MarineMap.

It is suggested (White et al., 2013) that in future MPA design processes

- Conventional fishery management (inside and outside the future MPA) and MPA planning efforts are coordinated
- Modelling assessments are integrated early on into MPA design, as part of a post-implementation adaptive management approach; and
- Empirical fishery data are integrated into bioeconomic models in order to improve representations of human behavior and short-term forecasts of changes in shed populations.

5.3.5. In decision making

The regional Blue Ribbon Task Forces were charged with giving the final recommendation of a preferred alternative MPA network to the California Fish and Game Commission which has the final authority to designate MPAs and adopt regulations. The recommendations built on work of the RSG and others, however were not bound by it. In the end, the modifications to stakeholder-



proposed MPAs in the final recommendations by the BRTF could appear modest but were always important to some constituency (Kirlin et al., 2013). Great care was taken to evaluate and extensively justify any modifications.

The California Fish and Game Commission took its decisions regarding MPA designation in each study region independently and never simply approved recommendations of the BRTF (or an alternative package of proposed MPAs from the RSG transmitted by the BRTF), or the recommendations of the California Department of Fish and Game (Kirlin et al., 2013).

A comprehensive evaluation of the Initiative's collaborative participation approach has not been conducted, leaving questions regarding the public's support for process outcomes (Sayce et al., 2013).

5.3.6. Implementation

As of 2013, the redesign of MPAs in open coast ocean waters in California and the designation of sites in all but the San Francisco Bay area is complete. However, the implementations of the management, monitoring and evaluation steps are only beginning (Kirlin et al., 2013). The California Code of Regulation lays down boundaries and general as well as site-specific management regulations for the individual MPAs in each region, e.g. for the North Coast as of December 20123.

Full implementation however requires further action, including (Kirlin et al., 2013):

- Communicate, educate and enforce the adopted regulations,
- Change behaviours of private and public parties whose actions are relevant to effective implementation of the adopted regulations,
- Monitor and evaluate progress in meeting the objectives of the Act,
- Adapt implementation in response to the monitoring and evaluation, and possibly
- New formal policy making including adoption of new regulations, creating, modifying or terminating MPAs under existing law or new statutes.

5.4. Effects on stakeholders

Through their engagement in MPA planning, many stakeholders of widely divergent constituencies gained an increased understanding of California's marine resources and the role of MPAs in marine management (Gleason *et al.*, 2013). Stakeholders also gained valuable experience in understanding the diversity of views on MPAs, and in working with others toward negotiated solutions. The personal relationships developed during the long, intense process have contributed to finding compromise during the planning process and may help to bridge gaps between viewpoints in other marine resource issues in the future (Fox *et al.*, 2013a).

Similarly, scientists involved in the processes gained valuable experience in making their scientific knowledge relevant to decisionmaking and effectively communicating science to diverse audiences (Gorud-Colvert *et al.*, 2010). The Initiative utilized the extensive scientific capacity in the state and engaged scientists as both advisors and stakeholders. Many of the scientists participated in more than



one regional process and their command of the issues and science communication skills improved significantly over time (Saarman *et al.*, 2013).

Early on in the MPA planning process, no adequate communication between government bodies and the California tribes existed. The regional planning processes provided a platform to the tribes to work together to represent their common interests and ultimately created the momentum for greater dialogue regarding tribal uses of marine resources within state waters (Gleason *et al.*, 2013).

5.5. Lessons learnt

5.5.1. General

- The multi-organisational funding and technical support substantially broadened the possibilities for creating and maintaining a year-long, demanding process with a high level of public and stakeholder engagement.
- High level political support and a clear legal framework (including the definition of three types of marine managed areas) was essential for successful completion of the state-wide planning process.
- Transparency of the process and decision-making is key to stakeholder involvement and engagement. However, not all objections and expectations can be sorted out.
- Substantial resources are required to engage stakeholders and the public, and address the challenges posed to the process from opponents and public scrutiny.
- A “master plan” agreed early on in the process (2008) helps this transparency: it provides background, context and a blueprint for implementing the relevant law, including a description of the process for designing alternative MPA proposals, an overview of the science guidelines and other design guidance, information on management, enforcement, monitoring, and funding of California’s MPAs, and specific information on newly adopted MPAs.
- A clear timeframe and a dedicated political will helps to focus efforts from all sides.
- The timeframe should be flexible to some extent and allow for several stakeholder discussion rounds. The iterative and adaptive process led to a successive improvement of the proposals relative to the scientific guidelines and feasibility.

5.5.2. Engaging the public

- Outreach and engagement staff is essential for broadening the approach and addressing more people.
- Together with facilitation, planning, and project management staff the outreach team identified where in the process the public could best inform or engage in MPA planning both formally and informally, and the methods by which the public could provide useful input and feedback on MPA proposal.
- One of the keys to success is an investment of time and effort into coming to understand how

communities value relationships, build trust, and engage with each other.

- Intentional relationship-building activities, ranging from individual conversations over “cups of tea”, to potlucks or field trips and other types of organized gatherings with community groups were instrumental to addressing a wide range of people in an informal way.
- Outreach staff acted as an increasingly well-known public facade for stakeholders - thereby lowering the communication threshold.
- Public meetings should not be too formal - renaming of workshops in “open houses”, combined with the invitation that anyone could drop in “at any time” increased participation and acceptance.
- The timing of meetings needs to take into consideration the availability of nonprofessionals. To further broaden the participation and information sharing, all Initiative meetings were webcast and made publicly available both in real-time and via archived audio and video.
- The type of media employed for providing the public with information (print, electronic, oral) depends on the public to be addressed.
- The language must be understandable - jargon and the use of acronyms should be kept to a minimum.
- Involving interested members of the public as “key communicators” may enlarge the outreach to hitherto unconnected communities.

5.5.3. Engaging stakeholders

- It is advantageous to allow for stakeholder engagement on different levels, i.e. here state level (SIG), regional level (RSG), and generally via communities and as individuals.
- Multi-stakeholder fora enhance intersectoral interaction.
- Some stakeholders never overcome their objections to MPAs as a conservation tool and thus their unwillingness to cooperate.

5.5.4. Engaging science

- The timely delivery of the best-readily available science is crucial to the involvement of stakeholders and politicians.
- Enough advance time for science to anticipate stakeholders’ questions and science needs is likely to reduce the ad-hoc manner of producing the output.
- The credibility of science/the scientific advisory team (SAT) enhanced due to its clear non-advocacy role - it only informed other Initiative participants.
- The role of science was limited to producing facts and guidelines, and evaluating stakeholder MPA scenarios against those rather than producing any proposals.
- A four-tier approach to communicating the science of marine reserves to the public and stakeholders was successful in meeting the various levels of information need.
- Scientists need training and should be supported by a communication strategy when transporting science to the public.

5.5.5. Decision making

- The primary decisions as to the design of a scientifically robust and feasible regional MPA network were taken by the stakeholders in the regional processes.
- Their recommendations were not required to provide a single solution but offered a range of preferred alternatives to decision-makers.
- The Blue Ribbon Task Force (BRTF) was a critical component in guiding the planning process and bringing it to a productive output (Kirlin et al., 2013): This volunteer body was composed of 5-8 public leaders appointed by the Secretary of the California Natural Resources Agency for their knowledge, vision, public policy experience, and diversity of professional expertise. Therefore, no stakeholders of any kind were represented. The BRTF gained legitimacy through decision-making transparency and conscientious application of the MLPA statute. Interactions with the SAT and RSG in each study region enhanced BRTF authority in making recommendations to the Commission regarding the MPA designation process.



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PANACHE

Protected Area Network Across
the Channel Ecosystem

PANACHE is a project in collaboration between France and Britain. It aims at a **better protection** of the Channel marine environment through the **networking** of existing marine protected areas.

The project's five objectives:

- **Assess** the existing marine protected areas network for its ecological coherence.
- **Mutualise** knowledge on monitoring techniques, share positive experiences.
- **Build** greater coherence and foster dialogue for a better management of marine protected areas.
- **Increase** general awareness of marine protected areas: build common ownership and stewardship, through engagement in joint citizen science programmes.
- **Develop** a public GIS database.

France and Great Britain are facing similar challenges to protect the marine biodiversity in their shared marine territory: PANACHE aims at providing a **common, coherent and efficient reaction**.

PANACHE est un projet franco-britannique, visant à une **meilleure protection de l'environnement marin de la Manche par la mise en réseau** des aires marines protégées existantes.

Les cinq objectifs du projet :

- **Étudier** la cohérence écologique du réseau des aires marines protégées.
- **Mutualiser** les acquis en matière de suivi de ces espaces, partager les expériences positives.
- **Consolider** la cohérence et encourager la concertation pour une meilleure gestion des aires marines protégées.
- **Accroître** la sensibilisation générale aux aires marines protégées : instaurer un sentiment d'appartenance et des attentes communes en développant des programmes de sciences participatives.
- **Instaurer** une base de données SIG publique.

France et Royaume-Uni sont confrontés à des défis analogues pour protéger la biodiversité marine de l'espace marin qu'ils partagent : PANACHE vise à apporter une **réponse commune, cohérente et efficace**.

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