

ENABLING EFFECTIVE AND EQUITABLE MARINE PROTECTED AREAS:

guidance on combining
governance approaches

Case Study Compendium



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Table of Contents

Glossary.....	6
MPAG Framework.....	10
Case study overview.....	18
1. Great Barrier Reef Marine Park, Australia	19
2. Darwin Mounds European Marine Site	25
3. North East Kent European Marine Site, UK	28
4. The Wash European Marine Site, UK	32
5. The Sanya Coral Reef National Marine Nature Reserve, China.....	37
6. Seaflower Marine Protected Area, Columbia.....	41
7. Galápagos Marine Reserve, Ecuador.....	45
8. Karimunjawa Marine National Park, Indonesia.....	49
9. Wakatobi National Park, SE Sulawesi, Indonesia.....	53
10. Tubbataha Reefs Natural Park, Philippines	57
11. Ha Long Bay Natural World Heritage Area, Vietnam	61
12. Os Miñarzos Marine Reserve of Fishing Interest, Spain.....	64
13. Isla Natividad MPA, Baja California Sur, Mexico	68
14. Great South Bay Marine Conservation Area, USA.....	71
15. Chumbe Island Coral Park, Tanzania	74
16. Baleia Franca Environmental Protected Area, Brazil.....	78
17. Pirajubaé Marine Extractive Reserve (RESEX), Brazil	81
18. Cres- Lošinj Special Marine Reserve	84
19. Velondriake Locally Managed Marine Area, Madagascar.....	87
20. Hol Chan Marine Reserve, Belize	90
21. Caye Caulker Marine Reserve, Belize	94
22. Bacalar Chico Marine Reserve, Belize	98
23. Fal & Helford European Marine Site, UK.....	101
24. Sandals Boscobel Special Fisheries Conservation Area, Jamaica.....	105
25. Oracabessa Special Fisheries Conservation Area, Jamaica.....	109
26. Bluefields Bay Special Fisheries Conservation Area, Jamaica	113
27. Nusa Penida MPA, Indonesia.....	116
28. Port-Cros National Park, France	120
29. Tavolara-Punta Coda Cavallo MPA, Italy.....	124
30. Ustica Island MPA, Italy.....	128
31. Cabo de Gata-Níjar National Park/MPA.....	132
32. Cabo de Palos-Islas Hormigas MPA, Spain	137
33. Shark Bay Marine Park, Australia	141
34. Ningaloo Marine Park, Australia	147

Introduction

This technical appendix provides a compendium of the 34 case study summaries that form the evidence base for the main volume: UN Environment (2019) *Enabling Effective and Equitable Marine Protected Areas – guidance on combining governance approaches*. Authors - Jones PJS, Murray RH and Vestergaard O.

These summaries are based on the 'Marine Protected Area Governance (MPAG)' framework, which is set out in the section after the glossary, and defines all the incentives used, as well as providing further guidance on how these summaries are populated. More information on the rationale behind the MPAG governance approach is provided in Jones PJS (2014) *Governing Marine Protected Areas: resilience through diversity*. Routledge.

More details on the MPA Governance project are at:

- <https://www.unenvironment.org/resources/marine-protected-area-governance>
- <https://www.ucl.ac.uk/marine-protected-area-governance/>

Glossary

All definitions after Jones (2014)¹ other than where other specific source cited. Italicised words in definitions are also separately defined in this glossary.

Actors

People involved in a given MPA governance initiative, including local users, representatives of governmental and non-governmental organisations, etc.

Basic conflicts

Conflicts based on differences between utilitarian values, focused on exploiting marine resources, and ecocentric-preservationist values, focused on conserving ecosystem health and setting areas aside from direct human uses, often revealed in the context of MPAs between those actors focused more on utilitarian objectives (using resources) and those focused more on conservation objectives (protecting biodiversity).

Biodiversity

The diversity of different ecosystems, habitats and species, including genetic diversity amongst different populations of a given species.

Conservation objective

An objective that is focused on protecting biodiversity and/or related natural resources from the direct and indirect impacts of human activities and related driving forces (also see operational objective). Effectiveness is focused on the degree and extent to which the impacts of users that can undermine the fulfilment of conservation objectives are reduced, and do not take account of operational objectives as these are considered in the MPAG framework in terms of incentives ('the means' by which effectiveness in achieving conservation objectives is reached).

Decentralisation

The transfer of authority from central government to lower-level government levels, quasi-independent government organisations, NGOs or the private sector, degrees and forms of autonomy ranging from deconcentration, to delegation, to devolution.²

Driving forces

The factors that can promote activities by users that can undermine effectiveness, such as increasing human populations, both from local population growth and inward migration, increasing demands from globalised fish and tourism markets, and the increasing aspirations of people to improve their living standards beyond subsistence livelihoods.

¹ Jones, P.J.S. (2014) *Governing Marine Protected Areas: resilience through diversity*. Routledge. Use discount code DC361 for 20% discount at [Routledge](#).

² Rondinelli, D. (2000) What is decentralization? pp2-5 in J. Litvack and J. Seddon (eds) *Decentralization Briefing Notes*, World Bank Institute in collaboration with PREM network, Washington DC; Oxhorn, P. (2004) Unraveling the puzzle of decentralization, pp3-32 in P Oxhorn, JS Tulchin and AD Selee (eds) *Decentralization, Democratic Governance, and Civil Society in Comparative Perspective: Africa, Asia, and Latin America*, John Hopkins University Press, Baltimore

Ecosystem health

A measure of the structural and functional integrity, biological diversity and resilience of marine ecosystems coupled with their capacity to provide sustainable flows of ecosystem services.

Ecosystem services

'The direct and indirect use benefits people obtain from ecosystems'³, such as food provision, nutrient recycling, climate regulation and shoreline protection.

Effectiveness

The degree to which an MPA's conservation objectives have been achieved and related obligations fulfilled, through the control of impacts, involving restrictions on the activities of users to which an MPA's species, habitats and ecosystems are sensitive. See next section for details.

Equity

The fair distribution of costs (related to restrictions on users) and benefits (related to the achievement of conservation objectives) arising from MPAs, including recognition of the importance of local cultures and ways of life, and the rights of local people to participate in decision-making processes that affect them.

Governance

Steering human behaviour through combinations of state, market and civil society approaches in order to achieve strategic objectives.

Incentives

A particular institution that is instrumentally designed in relation to an MPA to encourage actors to choose to behave in a manner that provides for certain strategic policy outcomes, particularly conservation objectives, to be achieved.

Institutions

Prescriptions that humans use to organize all forms of repetitive and structured interactions, including those within families, neighborhoods, markets, firms, sports leagues, churches, private associations, and governments at all scales.⁴

Management

The day-to-day control of users and their activities, including related technical and administrative approaches (see governance).

No-take

Marine areas designated for the conservation and restoration of their ecosystems, where all fishing activities are permanently banned, as are all other activities that involve the removal of living and non-living resources, e.g. recreational angling, shellfish collection, sand extraction. Can apply to a no-take MPA or a no-take zone (NTZ) (also see partially protected).

³ Beaumont, N.J. et al. (2007) 'Identification, definition and quantification of goods and services provided by marine biodiversity: implications for the ecosystem approach', *Marine Pollution Bulletin*, vol 54, pp253-265

⁴ Ostrom, E. (1995) *Understanding institutional diversity*, Princeton University Press, Princeton, New Jersey. p3

Operational objective

An objective focused on 'the means' by which conservation objectives ('the ends') are achieved, e.g. promoting the participation of local people, promoting awareness. These are considered in more detail in terms of incentives in this analysis, but such objectives are often explicitly stated as applying to many MPAs, so they are also listed as operational objectives in this analysis, recognising that such objective are considered in greater detail in later analyses of incentives.

Partially protected

Marine areas designated for the conservation and restoration of particular habitats and/or species, in which some activities that are compatible with such objectives are allowed, on the basis that they do not significantly impact the particular habitats, species, or ecosystems. Such activities include recreational angling and commercial fishing with static gears (traps, pots, set nets, etc.) and pelagic trawls (towed through the water column, but not usually across the seabed). Can apply to an entire MPA or to a zone or zones of an MPA (also see no-take).

Resilience

A measure of the persistence of systems and of their ability to absorb change and disturbance and still maintain the same relationships between populations or state variables.⁵

Social capital

A measure of the degree to which actors reach and implement decisions together through their professional and social networks, placing trust in one other, and having confidence that their cooperation with measures to achieve agreed collective objectives will be reciprocated by other actors.

Stakeholders

People who have a stake in a given MPA as they are direct or indirect users and thereby benefit from ecosystem services. This is generally confined to users, but some definitions are more akin to actors in that they include representatives of state organisations, NGOs, etc., whilst others include wider members of wider society who may gain more distant indirect benefits, sometimes even extending to future generations. Due to the ambiguity of this term, it is only used where appropriate to the case study context.

State capacity

The potential of the national government and related state agencies to govern the activities of the country's people and address their related interests. Based on the World Bank's Worldwide Governance Indicators (WGI) project, which is particularly focused on six dimensions of governance – voice and accountability; political stability and absence of violence; government effectiveness; regulatory quality; rule of law; control of corruption. Calculated by taking the average of the six scores (-2.5 to +2.5) and of the six percentile rankings assigned for that country in which the MPA is located. The 'country profiles' from which these scores and rankings are derived can be accessed at www.govindicators.org

⁵ Holling, C.S. (1973) 'Resilience and stability of ecological systems', *Annual Review of Ecology and Systematics*, vol 4, pp1-23

Users

People who use an MPA on a direct basis, by extracting natural resources, or on an indirect basis, through non-extractive recreational activities, aesthetic appreciation, etc.. For the purposes of this study, users are confined to those who live in the locality of the MPA or who often visit it for direct and indirect uses, i.e. it excludes people in wider society who may gain more distant indirect benefits. Representatives of state organisations are not considered as users.

28. Port-Cros National Park, France – Katie Hogg, Pedro Noguera-Méndez and María Semitiel-García, PhD research (2013)

Name	Port-Cros National Park, France	Year of designation	1963
Area	Terrestrial/coastal 10KM ² , marine 16KM ² , marine adherence area (buffer zone) 123km ²	State Capacity	1.04 (rank 79.9%, 2016)
GDP per capita	US\$35,700 (2013)	Human Development Index (HDI)	0.884
GDP Growth Rate	0.3%	Population below the poverty line	7.9%

The original area of the park was created in 1963 following a typically top- down process. Between 2012-2016 the park has undergone a collaborative decision-making process, drafting new plans for the park, to extend the area to cover Porquerolles Island and several mainland communes. At the end of 2016 the communes will decide whether to agree to the charter and extension of the park. The information provided in the report refers to the marine part of the park.

MPA Objectives:

Conservation	Operational
To protect the unique biodiversity and cultural heritage.	Organisation of public reception and control of visitor numbers
Preservation of the natural heritage	Dissemination of environmental education and transmission of knowledge
Preservation of the landscape and cultural identity of the island	Reinforcement and development of partnerships for sustainable development of the territories

Drivers and Conflicts:

- In the area of Port-Cros National Park, there is an annual charter signed by fishers to abide by the rules of the area and to be allowed to fish in the area. This, however, is not the same for the area around Porquerolles Island where both artisanal and recreational fishing continue to present a serious management challenge. A NTZ (~0.5 KM²) was designated on the southern coast of Porquerolles in collaboration with local users to restrict all recreational fishing and in other areas recreational fishing is limited seasonally. But trawlers from Hyeres were reported to operate in the area and were perceived as a significant threat to the park's effectiveness. There are 700 boats authorised to fish recreationally within the MPA, but those who have a licence from before 2007 are not restricted, causing additional management concerns for the park and questions about the balance between fisheries development and conservation.
- Incoming external fishers are a serious issue as budget cuts, staff reductions and vigilance has reduced significantly since the economic crisis in 2007. Recreational fishers have also increased illegal fishing to supplement income, creating potential conflicts between user groups. Both situations are reducing stocks and impacting market prices for fish.
- There is a need to better balance the tourism industry to ensure that it is economically beneficial whilst minimising environmental impact. PCNP is a top tourist destination attracting high-end tourists and many pleasure boats. The local government focus is on economic development which is often in conflict with conservation objectives. The growth of activities has increased environmental degradation. Impacts from diving and snorkelling, anchoring, sedimentation and tourism-related infrastructure development are increasing. The increases in tourism have not been adequately addressed as in peak seasons amenities are overrun and the infrastructure is stretched, with high levels of disruption for local residents. Anchoring and mooring regulations have been introduced to manage pleasure boat visits, but this is expensive to install and maintain, creating additional financial burden for the park, and breaches of regulations remain common. This has also been connected with the introduction of invasive species. Diving has been regulated with specific areas designated, but there are no official carrying capacity limits on diver numbers in place. The growth of the dive industry has created conflicts between them and fishers. Collaboration with dive operators and involvement with monitoring of the marine environment and reporting of invasive species keeps them

involved and there is a satisfaction with the levels of growth, but more could be done to respect fishing activities and to encourage profits from the dive industry to remain within the community.

Governance Framework/Approach:

Government-led - There are increased elements of decentralisation and substantial community participation. The government retains overall control with daily management conducted by the government agency Parcs Nationaux de France, supported by a management board. The management board includes representatives from the central government, the regional government, and members chosen for their national or local relevance (eg landowners, residents, users and representatives of environmental NGOs or sectoral trade organisations). The management board is further supported by scientific councils to ensure decisions are evidence-based and there is also a social and cultural committee. Since 2006 the reform of French National Parks has redefined governance: it is still government led but participation is now legally required. During the development of the N-PCNP charter extensive meetings have been held which were open to the public and representatives of the different sectors were involved. In 2012 park staff were officially granted as 'environmental police' by law with the status to enforce park regulations and issue sanctions. Recent processes to develop the Charter of the National Park to discuss, modify and improve the charter has included a largely 'bottom-up' approach including residents, users and elected representatives. It was approved by the French Environmental Ministry. The increase in public participation has helped to resolve many existing issues and improve overall public acceptance and support for the park.

Effectiveness: 2 - *Some impacts partly addressed but some impacts not yet addressed.* The impacts of recreational and commercial fishing and of tourism continue to challenge the effectiveness of this MPA and it remains to be seen if the 2012 revisions will address these.

Incentives (Y= used; Y*= Used but particularly in need of strengthening; N= Not used; N*= Not used but particularly in need of introducing; only used, needed and not used/needed but notable incentives for a given case study are listed in these tables)

Economic

Incentive type	Used	How/Why
3. Reducing the leakage of benefits	Y*	Restrictions on incoming commercial fishers should retain related benefits amongst local fishers, but illegal incoming fishers continue to undermine this. The local economy derives major economic benefits from tourism but concerns remain at the leakage of benefits related to incoming tourism operators.
4. Promoting profitable and sustainable fishing and tourism	Y	The promotion of a balance between conservation and sustainable fishing is at the heart of the 2006 French National Park reform, which is focussed on through the management of fisheries to promote sustainability in this MPA.
5. Promoting green marketing	N*	Previously a green marketing scheme was piloted with a few fishers, but it was challenging to ensure that they were meeting the necessary standards. A more clearly defined green marketing approach would be very beneficial, but a system is required that ensures standards are met. It is believed that these schemes would increase the value of the products and recognise the traditional techniques applied.
6. Promoting diversified and supplementary livelihoods	N*	Employment opportunities on the island are very limited and the younger generation are generally leaving as there is not sufficient employment. Fishing and tourism are the main sectors of employment, but they are associated with environmental impacts that need to be better addressed, and there is considerable leakage of related benefits to incoming fishers and tourism operators, both issues that providing better livelihoods for local people in tourism and sustainable fishing would help address
8. Investing MPA income/funding in facilities for local communities	N*	The public/ local acceptance of the park is increasing. Investing some MPA funding in the local infrastructure would further increase public acceptance and potentially increase community stewardship.

9. Provision of state funding	Y	There is currently sufficient support from the government and national park resource in terms of human and financial resource, but recent cuts threaten to undermine effectiveness.
10. Provision of NGO, private sector and user fee funding	N*	State funding cuts are increasingly threatening the ability of the staff to achieve their conservation objectives. Additional funding is required to increase the number of staff and resources to reduce impacts and NGO, private sector and/or user fee funding could help address this.

Communication

11. Raising awareness	Y*	Awareness remains low amongst tourists and some locals despite public meetings, volunteer opportunities, websites, school programmes, guided tours and conservation signage.
12. Promoting recognition of benefits	Y	The benefits of the MPA are communicated through all of the channels noted above.
Promoting recognition of regulations and restrictions	Y*	The rules and regulations are all communicated through the media channels and other routes to address the local surrounding community and visitors but more could be done to make tourists aware of regulations and restrictions.

Knowledge

14. Promoting collective learning	N*	At present, data used is mostly if not all scientific and dominated by the scientific committee. More effort is required to harness local knowledge to build confidence and trust in the data and related knowledges being used to make decisions.
16. Independent advice and arbitration	Y	Advice is often sought from scientists not involved in the MPA for expert knowledge. Port Cros has a management board supported by two scientific committees and a more recent cultural and social committee.

Legal

17. Hierarchical obligations	Y	This MPA is part of the Natura 2000 Network and is declared as a SPAMI as well as being part of the MedPan Network, all of which require set obligations to be delivered.
18. Capacity for enforcement	Y*	Park staff are granted Environmental Police status to enforce park regulations and to issue sanctions but there are concerns that state budget cuts will lead to reductions in surveillance and enforcement capacity.
19. Penalties for deterrence	Y	Penalties (fines) are provided for in the overall legal framework.
20. Protection from incoming users	N*	There were concerns regarding the trawlers that are permitted to operate in the adherence area. Also, regulations that are applied to recreational fishing licencing were seen to be inadequate and created a threat to commercial fishers. Furthermore, tourists regularly fished in areas that they are not permitted to do so due to the lack of awareness/knowledge. In Port Cros, local fishers are protected from incoming users as there is a specific fishing charter. However, this does not extend to Porquerolles (the area of extension) leaving these fishers more vulnerable to incoming users.
22. Cross-jurisdictional coordination	Y	A management board consists of representatives from central and local government, landowners, users and representatives of environmental NGOs to enable coordination of activities and actions across different jurisdictional areas, but there is a need for improved coordination and for other authorities to exercise their functions in a way that better addresses conflicts, e.g. to establish limits on tourists and vessel numbers.
23. Clear and consistent legal definitions	Y	Legal definitions are created under the Environmental code.
25. Legal adjudication platforms	Y	This legal process is managed by the state and there are routes and platforms to appeal decisions

Participation

27. Rules for Participation	Y	The legislative framework makes providing for stakeholder participation obligatory, including details on which sectors and groups should be represented on the management board and related committees and the need to be open to the public.
28. Establishing collaborative platforms	Y	The 'Charter of the National Park' established several such collaborative platforms in various locations with residents, users, electoral representatives, etc.
31. Decentralising responsibilities	Y	Many responsibilities are decentralised to the management board and, in turn, to related committees and public meetings.
32. Peer enforcement	N*	During peak season, there are a lot of tourists to manage and monitor and insufficient park staff to do so. In addition, the difficulties created by locals vs tourists related to local privileges when it comes to regulation application is an issue that needs to be addressed. Also it was reported that some individuals were still unsure about the park and the restrictions. A volunteer warden scheme could overcome some of these issues, increasing awareness regarding the benefits of the regulations and increasing the sense of stewardship
33. Building trust and the capacity for cooperation	Y	The involvement of users and locals in the Charter of the National Park helped to resolve many existing issues of public participation and improved the overall acceptance of and support for the park.
34. Building linkages between relevant authorities and user representatives	Y	Strategic relationships were built with key user and local representatives to enable the creation and implementation of the Charter of the National Park and the investment in these relationships is ongoing.

Cross-cutting themes:

Leadership

Strong leadership from the national government and the French national park agency characterise and influence the governance of PCNP. It results in a strong top-down governance structure. Participation is increasing but again this is driven from the top-down included in the parks legal mandate;

Equity

Issues with equity exist in the implementation of MPA regulations in summer vs. winter months and between locals vs. tourists;

Stewardship

Previous public opposition to the national park prevented park extension. Increased use of participative incentives and transparent decision-making processes is increasing acceptability for the park, and community stewardship towards the MPA is gradually increasing