IUCN Conservation Outlook Assessment 2017 **(archived)**
Finalised on 08 November 2017

Please note: this is an archived Conservation Outlook Assessment for Malpelo Fauna and Flora Sanctuary. To access the most up-to-date Conservation Outlook Assessment for this site, please visit https://www.worldheritageoutlook.iucn.org.

Malpelo Fauna and Flora Sanctuary

SITE INFORMATION

Country:
Colombia
Inscribed in: 2006
Criteria:
(vii) (ix)

Site description:

Located some 506 km off the coast of Colombia, the site includes Malpelo island (350 ha) and the surrounding marine environment (857,150 ha). This vast marine park, the largest no-fishing zone in the Eastern Tropical Pacific, provides a critical habitat for internationally threatened marine species, and is a major source of nutrients resulting in large aggregations of marine biodiversity. It is in particular a ‘reservoir' for sharks, giant grouper and billfish and is one of the few places in the world where sightings of the short-nosed ragged-toothed shark, a deepwater shark, have been confirmed. Widely recognized as one of the top diving sites in the world, due to the presence of steep walls and caves of outstanding natural beauty, these deep waters support important populations of large predators and pelagic species (e.g. aggregations of over 200 hammerhead sharks and over 1,000 silky sharks, whale sharks and tuna have been recorded) in an undisturbed environment where they maintain natural behavioural patterns. © UNESCO

SUMMARY

2017 Conservation Outlook

Good with some concerns

The conservation outlook for the site is positive compared to the situation of many marine protected areas in the World. This is because of the size and remoteness of the property, the existence of a large no-take area and the encouraging conservation efforts by governmental and non-governmental actors, including foundations, research institutions and tourism operators. While many management aspects demonstrate highly effective performance, law enforcement with regards to illegal fishing remains the biggest challenge. Illegal fishing can be considered the largest current threat to the site, with both illegal artisanal and, more importantly, illegal industrial fishing occurring within and around the marine protected zone, including by foreign vessels. Intensified efforts and technology are needed to curb and eventually completely prevent illegal fishing. Improved international cooperation is needed to ensure the management of marine traffic, pollution and fisheries in the Tropical Eastern Pacific. Malpelo and the various other World Heritage properties in the Eastern Tropical Pacific can play a key role in large scale seascape management under the umbrella of CMAR.

Current state and trend of VALUES

Low Concern
Trend: Stable

The current state and trend of World Heritage values continue to be very good despite the occurrence of illegal fishing. Ecological processes remain largely intact in the site as evidenced by the population densities of a broad range of apex predators and pelagic species. Populations of most key species remain stable. One alarming exception is the scalloped hammerhead whose population has decreased by almost 80% in the last ten years.

Overall THREATS

High Threat

Illegal fishing is the largest current threat to the site, with both illegal artisanal and, more importantly, illegal industrial fishing occurring within and around the marine protected zone, including by foreign vessels. More efficient monitoring and law enforcement is required in the no-take areas. Illegal fishing in the wider region is even more challenging and likely to impact on the longer term integrity of the property. In the longer term, the pressure on marine resources is expected to increase in line with global trends and as a function of resource depletion elsewhere. Alien invasive species and disturbance from visiting tourists, scientists and Navy personnel likewise pose threats but appear comparatively straightforward to manage. However, stronger measures need to be taken to prevent any potential new introductions of invasive species.

Overall PROTECTION and MANAGEMENT

Mostly Effective

Within a relatively short period of time protection and management activities have well advanced and in the recent years the protected area has increased its financial, technical, human and operational resources. However, further consolidation of funding and management is needed, also on the regional basis provided by CMAR, in particular increased efforts in monitoring and law enforcement. While formal involvement of the Navy into enforcement activities provides an important framework, due to the large size of the property the law enforcement capacity remains low due to lack of personnel and equipment and therefore the property remains under pressure from illegal fishing. A Management Plan was completed in 2015 for the years 2015-2020, but still needs funding for its implementation.

FULL ASSESSMENT

Description of values

Values

World Heritage values

▶ **Undisturbed marine wilderness**
Criterion:(vii)

The large and remote marine environment of the Malpelo FFS encompasses steep walls, dramatic rock formations, caves and tunnels. A sight of extraordinary natural beauty, major aggregations of the full range of large top predators and pelagic species constitute an increasingly rare phenomenon in the world's overfished oceans. It is one of the few areas in the world where natural population densities and behavioral patterns of these species can be observed in an undisturbed "marine wilderness” (IUCN, 2006, 30COM 8B.28). To-date, no signs of impacts from invasive species have been identified.

▶ **Globally significant marine protected area with unaltered and non-threatened ecosystems**
Criterion:(ix)

As the largest no-fishing zone in the Eastern Tropical Pacific, the Malpelo Fauna and Flora Sanctuary is a globally significant marine protected area with unaltered and non-threatened ecosystems, free of invasive species impacts, that is essential to maintain and replenish the population of sharks, giant grouper and billfish in the Eastern Tropical Pacific (30 COM 8B.28) . Several marine currents meet at Malpelo FFS, making the site an unusual geographical spot. Jointly with the rugged underwater topography this results in a complex and diverse array of habitats and species. The three major

marine communities surrounding Malpelo Island are the vertical habitats, the coral reefs and the pelagic. Large top predators continue to fulfil their ecological roles while behaviour patterns continue undisturbed and still free of major acute threats, providing exceptional research opportunities. The small island and its rocky satellites are believed to serve as an aggregation point of critical importance for the reproduction of numerous marine species. Impressive populations of marine species include Giant Grouper, Billfish and various shark species, including major aggregations of Hammerhead Shark, Silky Shark, Whale Shark and Tuna. Seventeen marine mammals' species were documented, besides numerous reptiles (some endemic). Close to 400 fish species have been recorded, including several endemics. The small terrestrial areas are home to several endemic animal species, including reptiles (Phyllodactylus transversalis and Diploglossus millepunctatus), snails (Malpelina labiate and Ischnocion conica) and one species of crab (Johngarthia malpilensis), and also support large nesting seabird colonies. Most shark populations have even been increasing (Fundación Malpelo, 2016), evidencing the importance of this site in global conservation efforts for this threatened species. There is a high diversity of fish assemblages and piscivorous species show both high biomass and high endemism values (Quimbayo et al. 2017). It is the most important nesting site for seabirds along the Colombian Pacific shore and the only one in Colombia for the Nazca booby Sula granti (Fundación Malpelo, 2016).

Other important biodiversity values

► Part of the Eastern Tropical Pacific Marine Corridor

Malpelo FFS is an integral part of the Eastern Tropical Pacific Marine Corridor, a marine conservation site network regionally known by its Spanish acronym CMAR. CMAR also includes World Heritage sites in Costa Rica, Ecuador and Panama and another marine and coastal protected area in Colombia. While much of the potential remains to be realized, CMAR constitutes a rare chance for large scale marine management and conservation across international boundaries.

Assessment information

Threats

Current Threats

Very High Threat

Illegal artisanal and, more importantly, illegal industrial fishing within and around the marine protected zone is a continuing problem. Vessels from various nations illegally enter and fish within the site, attracted by the abundance of pelagic fishes and sharks, causing great damage to the ecosystem. More efficient monitoring and law enforcement is required in the no-take areas. Illegal fishing in the wider region is even more challenging and likely to impact on the longer term integrity of the property.

▶ Other Activities

Low Threat
Inside site, localised(<5%)

The small naval station on the island impacts local fauna and flora, even though care is taken to reduce this to a minimum (Fundación Malpelo, 2012).

▶ Fishing / Harvesting Aquatic Resources

Very High Threat
Inside site, widespread(15-50%)
Outside site

Illegal artisanal and, more importantly, illegal industrial fishing within and around the marine protected zone is a continuing problem. Vessels from various nations illegally enter and fish within the Sanctuary, attracted by the abundance of pelagic fishes and sharks, causing great damage to the ecosystem. A single boat can extract thousands of sharks in a few hours (Fundación Malpelo, 2012 Shark finning is still a serious threat, as well as illegal fishing of tuna and groupers (Fundación Malpelo, 2016). More efficient monitoring and law enforcement is required in the no-take areas. In 2016,

from 20 vessels that practiced illegal fishing, only 3 were effectively submitted to penalties, due to legal gaps (Fundación Malpelo, 2016). Illegal fishing in the wider region is even more challenging and likely to impact on the longer-term integrity of the property. Enforcement needs to be improved by increasing the number of vessels at the small naval station and/or by introducing new technologies. As a response to the threat, permanent presence of personnel either of Parques Nacionales Naturales or of the Colombian Navy has been established. However, insufficient resources and equipment, as well as logistical constraints, have made it difficult to ensure effective enforcement throughout this large area (IUCN Consultation, 2017).

► Temperature extremes

High Threat
Inside site, throughout(>50%)
Outside site

Climate change has been recognized as one of priority issues in the current Management plan of Malpelo FFS, with its impacts assessed as moderate on terrestrial and pelagic areas and high on bentic communities (Parques Nacionales Naturales, 2015).
Effects of climate change are multiple. Abnormally high water temperatures affect corals, cause changes in ecosystem productivity, result in harmful algal blooms and cause physiological stress in some species (Parques Nacionales Naturales, 2015).

Potential Threats

Low Threat

Accidental introduction of exotic species and increasing tourism pose relatively low-level potential threats to date, however, stronger measures need to be taken to prevent future invasions. In the longer term, the pressure on marine resources is expected to increase in line with global trends and as a function of resource depletion elsewhere. Illegal fishing requires monitoring and law enforcement while management of legal fisheries in the wider marine region likewise needs to respond to the increasing demand. Studies on plastic marine pollution besides the comparatively well-understood situation in the North Pacific are at the infancy stage. Increasing dive tourism currently does not

pose a serious threat , but needs management actions to prevent impacts.

▶ Solid Waste

High Threat
Outside site

Major risks include increasing marine traffic which is addressed by the PSSA designation. The confirmation of garbage patches in various parts of the Pacific is an even more complex and truly global challenge. Recent research has recorded marine plastic pollution both north and south of the Eastern Tropical Pacific suggesting that even remote locations far from pollution sources can be at risk. (http://www.sciencedirect.com/science/article/pii/S0025326X12006224#f0005).

▶ Tourism/ visitors/ recreation

Low Threat
Inside site, localised(<5%)
Outside site

Recreational and scientific boating and scuba diving can negatively affect the Sanctuary. While a relatively small number of some 600 divers visit the site per year, active management is required (Fundación Malpelo, 2012) to improve dive tourism as a sustainable tourism activity, as done in other marine protected areas of the biological corridor.

▶ Invasive Non-Native/ Alien Species

High Threat
Inside site, extent of threat not known

Few marine non-native species were detected in the last few years (i.e. Carijoa spp). There is no information about the source of these introductions but octocoral populations in the Eastern Tropical Pacific have been declining due to massive mortalities, microbial diseases and the invasion by Carijoa riisei. While no impacts were detected within Malpelo Sanctuary, this is considered a high threat due to the high level of endemism in the protected area. Therefore, stronger measures must be taken to prevent future invasions. Scientists, tourists and Navy personnel should follow strict protocols to minimise the risks, as described in its Management Plan for 2015-

2020 (Parques Nacionales Naturales de Colombia, 2015)

► Fishing / Harvesting Aquatic Resources

Low Threat
Inside site, scattered(5-15%)
Outside site

In the medium term, the management of fisheries in the wider seascape must be a factor in the equation of Malpelo FFS. Bilateral agreements are needed to avoid illegal fishing by vessels that come from other countries like Ecuador and Costa Rica. If not addressed timely, this threat might soon become a high threat.

Protection and management

Assessing Protection and Management

► Relationships with local people

Mostly Effective

Due to the remoteness of the area, there are no local communities within or in the vicinity of the property. Cooperation with the Navy station personnel located within the property is effective. Increasing relationship with fishermen based at Buenaventura and Tumaco Ports in Colombia would be highly advisable, as fishermen are concerned about the declaration of the protected area and its recent expansion, and a better understanding of the goals of this PA would change their perception (IUCN Consultation, 2017).

► Legal framework

Some Concern

In a recent analysis, Conservation International (2017) based on a by WildAid, identified a number of challenges in the broader Eastern Pacific Seascape, including unclear or incomplete enforcement policy frameworks; inadequate strategies, staffing and technologies to detect and intercept offenders; inadequate preparation for effective legal cases, resulting in difficulties in both administrative and judicial processes and unclear and overlapping responsibilities between different institutions (IUCN Consultation,

2017). The new Illegal Fishing Law (1851, June 2017) can help improve the legal framework at a national level, including some of the inefficiencies that were identified a year ago for MFFS. Additionally Colombia has two new tools to denounce illegal activities in EEZ: The National Identification Vessel tool (www.uvicolombia.org) and the Guia para el control y la vigilancia de los recursos pesqueros de Colombia (www.guiacontrolyvigilancia.com).

► Enforcement

Some Concern

The Navy, Fundación Malpelo and Conservation Internal have been supporting the Parques Nacionales Naturales de Colombia in enforcement activities and through a collaboration agreement between these organizations, a surveillance vessel had been on patrol in the area, however the vessel is not operating at the time thus the agreement needs to be updated. However, compared to the large size of the property the law enforcement capacity remains limited and the property remains under pressure from illegal industrial and semi-industrial fishing (WildAid, 2010). In the Operational Plan for 2016, legal proceedings of cases of illegal fishing and legal sanctions were also assessed as having the poorest performance among all management actions (IUCN Consultation, 2017).

► Integration into regional and national planning systems

Mostly Effective

This large marine protected area is a key component of Colombia’s National Fisheries Management Plan for the Pacific Region and an integral part of the Eastern Tropical Pacific Marine Corridor (CMAR), and it is also a focal site for the ETPS Eastern Tropical Pacific Seascape indetified in 2004 by CI with other 30 protected areas of Colombia, Costa Rica, Panama and Ecuador (https://www.conservation.org/where/Pages/Eastern-Tropical-Pacific-Seascape.aspx). Bi-lateral agreements started to be developed between Colombia and Costa Rica regarding patrolling and law enforcement in their respective waters with emphasis on marine protected areas (Parques Nacionales Naturales de Colombia, 2015)

► Management system

Mostly Effective

The island and surrounding waters are administered by Colombia's Protected Areas Agency which holds an agreement with an NGO for the implementation of the management plan. An agreement between Parques Nacionales Naturales de Colombia and NGO Fundación Malpelo was signed 2013 with the aim of joining efforts in the implementation of the Management Plan for the site. Fundación Malpelo also operates the endowment resources. Another agreement was signed in 2014 between Parques Nacionales Naturales de Colombia, Fundación Malpelo and Conservation International aimed at establishing cooperation in the field of law enforcement and combating of illegal fishing (Fundación Malpelo and Parques Nacionales Naturales, 2016). The Colombian Navy, the only permanent human presence on Malpelo Island, cooperates in the patrolling of the island and the surrounding waters. While cooperation with both non-governmental organizations and intergovernmental cooperation between different agencies is very positive, many challenges remain, particularly in the field of law enforcement. A new Management Plan was completed in 2015 for the years 2015-2020, but still lacks funding for its implementation. The 5M USD Malpelo Endowment allocates 40% of funding for management activities, however this is not enough.

► Management effectiveness

Mostly Effective

The Colombia Protected Areas Agency evaluates on a periodical basis the management effectiveness of all national protected areas. The most recent assessment was made on short-term effectiveness, with scores of 60, 66 and 69%, respectively (Fundación Malpelo, 2013). Since the assessment was made, recommendations have been followed on strengthening the National Agency personnel, updating monitoring protocols and a better coordination between Fundación Malpelo and park officers. Details of recent actions for management effectiveness, including aspects of governance, are described in the Management Plan 2015-2020 (Parques Nacionales Naturales de Colombia, 2015).

► Implementation of Committee decisions and recommendations

Some Concern

The inscription decision in 2006 recommended improving management

highlighting illegal fishing, as well as strengthening tourism management, developing long term funding and embarking on research in the poorly known deeper areas, including seamounts.

► Boundaries

Mostly Effective

Terrestrial areas covered in their entirety, marine boundaries cover a broad range of the diverse habitats. In 2016 the President of Colombia announced that Malpelo Flora and Fauna Sanctuary would be significantly enlarged (http://www.parquesnacionales.gov.co/portal/es/presidente-juan-manuel-santos-anuncia-ampliacion-de-santuario-de-fauna-y-flora-de-malpelo/). The Distrito Nacional de Manejo Integrado Yaruparí-Malpelo, with an extension of almost 2.7 m ha, was established by the Ministerio de Medio Ambiente and the Autoridad Nacional de Acuicultura y Pesca as a strategic area for the development of sustainable and responsible fishing practices (Ministerio de Ambiente y Desarrollo Sostenible, 2017).

► Sustainable finance

Highly Effective

A privately administered 5 million USD endowment (Conservation International/Global Conservation Fund + Fondo Acción) with public-private governance provides annual funding since 2009 for main activities of the management plan through an NGO operator that also leverages significant additional funding. Currently the operator is Fundación Malpelo.. The full potential of tourism revenues remains to be realized.

► Staff training and development

Some Concern

Navy personnel stationed on the island on a rotational basis have been trained with protocols to minimise the risks of introducing alien invasive species. The Navy also supports the management of the area, as does Fundación Malpelo through a cooperative agreement. However, even with this external support, staff numbers are insufficient, particularly to ensure law enforcement (WildAid, 2010).

► Sustainable use

Mostly Effective

Recreational and scientific diving in the Sanctuary is strictly regulated.

► Education and interpretation programs

Mostly Effective

Oral and video presentations are made in the capital of Bogota, Cali, and Buenaventura at secondary schools, universities, international meetings, and on-board boats visiting Malpelo to further awareness of the conservation values of the Sanctuary (Fundación Malpelo, 2012).

► Tourism and visitation management

Mostly Effective

Approximately 20 ships and 600 divers visit the Sanctuary annually. The diving boats furnish accommodation, food, and equipment for divers, and only 25 divers are allowed at one time in dive sites. Concessionaires assume the cost of maintenance of anchor buoys. A handbook has been developed that regulates activities that can be undertaken in the Sanctuary. The Fundación Malpelo conducts some of the tours to the Sanctuary, and the proceeds help pay for management of the site. The Foundation also attends major diving fairs in Europe and the U.S. to promote conservation and travel to the Sanctuary (Fundación Malpelo, 2012).

► Monitoring

Mostly Effective

Diving boats visiting the Sanctuary monitor ecosystem status including data on sea temperatures, marine mammals, turtles, birds, and the presence of fishing boats in the area. The Fundación Malpelo has monitored populations of Hammerhead Sharks since 2000 (Fundación Malpelo, 2012). Monitoring is also carried out through annual expeditions by the Fundación Malpelo, the Universidad del Valle, the Caldris Association and BIOMMAR group, partially funded by CI-FA Malpelo Endowment. Monitoring of the Nazca boobies has also been conducted at Malpelo which is the only place in Colombia where this bird nests (Fundación Malpelo and Parques Nacionales Naturales, 2016;

Lopez-Victoria et al. 2009). In cooperation with the Universidad del Valle, monitoring of some key endemic fish species has been conducted since 2013 (Fundación Malpelo and Parques Nacionales Naturales, 2016). However, monitoring could be further strengthened, including by embracing new technological opportunities, in order to have more systematic data to better inform decision making.

► Research

Mostly Effective

Research has been conducted in the Sanctuary since 1999 by the Colombian Institute for Marine and Coastal Investigation (INVEMAR), the Colombian Navy, the Calidris Association, the Malpelo Foundation, the Universidad del Valle, and the Colombian Protected Areas Agency. The Malpelo FFS is remote and in very good condition, and therefore an excellent research location and much is still to be done. Only in 1998 was the latest shark species discovered (Odontaspis ferox). Currentl research includes monitoring of invasive octocoral species, connectivity patterns of two pelagic fish species, effects of climate change in the growth dynamics of an octocoral, and several studies on genetic connectivity and fisheries that make part of the Sharks' National Action Plan. In 2005 there was a submarine expedition, the Deep Ocean Quest, to explore the seas down to 1,000m, coordinated by MarViva, (the Costa Rican Marine Conservation Organization) and the Malpelo Foundation, with the financial support of Conservation International. (PNNC, 2006). (WDPA, 2011)

Overall assessment of protection and management

Mostly Effective

Within a relatively short period of time protection and management activities have well advanced and in the recent years the protected area has increased its financial, technical, human and operational resources. However, further consolidation of funding and management is needed, also on the regional basis provided by CMAR, in particular increased efforts in monitoring and law enforcement. While formal involvement of the Navy into enforcement activities provides an important framework, due to the large size of the property the law enforcement capacity remains low due to lack of personnel and equipment and therefore the property remains under pressure from illegal fishing. A

Management Plan was completed in 2015 for the years 2015-2020, but still needs funding for its implementation.

▶ **Assessment of the effectiveness of protection and management in addressing threats outside the site**
Some Concern

Management efforts outside the large marine protected area, e.g. fisheries, are not directly coordinated with the management of the property.

▶ **Best practice examples**

The conservation history of Malpelo FFS, including the successful World Heritage nomination, is based on an exemplary cooperation between governmental and non-governmental actors.

State and trend of values

Assessing the current state and trend of values

World Heritage values

▶ **Undisturbed marine wilderness**
Low Concern
Trend:Stable

The pristine natural beauty of the site remains largely preserved.

▶ **Globally significant marine protected area with unaltered and non-threatened ecosystems**
Low Concern
Trend:Stable

Ecological processes remain largely intact in the site as evidenced by the population densities of a broad range of apex predators and pelagic species. The location of the site and its related role as an aggregation point enable dispersal and replenishment of benthic larvae of corals, fish and mollusks and other marine life in the broader Eastern Tropical Pacific.
Some of the species of elasmobranchii have shown certain fluctuations in

their numbers, most likely influenced by the El Niño and La Niña phenomena. However, most of these populations show overall stable trends, with the exception of the scalloped hammerhead shark (Sphyrna lewini, EN) whose population has declined by almost 80% in the last ten years (Fundación Malpelo and Parques Nacionales Naturales, 2016; Bessudo et al., 2016; IUCN Consultation, 2017). An assessment by García (2013) evaluated the ecological integrity of the site based on three main indicators - birds (Sula granti), corals and fish - and concluded that the overall ecological integrity was good.

Summary of the Values

► **Assessment of the current state and trend of World Heritage values**

Low Concern

Trend: Stable

The current state and trend of World Heritage values continue to be very good despite the occurrence of illegal fishing. Ecological processes remain largely intact in the site as evidenced by the population densities of a broad range of apex predators and pelagic species. Populations of most key species remain stable. One alarming exception is the scalloped hammerhead whose population has decreased by almost 80% in the last ten years.

► **Assessment of the current state and trend of other important biodiversity values**

Low Concern

Trend: Data Deficient

The above mentioned illegal fishing is a broader challenge transcending national boundaries, including within the regional CMAR efforts.

Additional information

Benefits

Understanding Benefits

▶ Importance for research

The Sanctuary is in very good condition as regards contamination and other modifications and impacts. Jointly with the population densities and behaviour patterns considered natural Malpelo is a reference area for many aspects of marine ecology and biology.

▶ Fishing areas and conservation of fish stocks

The Malpelo FFS serves as a major reproduction, breeding and nursery area for many forms of marine life and contributes to the productivity of the fisheries of the Eastern Tropical Pacific. Conservation of a number of fish species of high commercial relevance depends on Malpelo's no-take zones.

▶ Tourism-related income, Provision of jobs

Dive tourism is the main economic activity. Divers are mostly attracted by mega-fauna, but it’s still in small scale (600 divers/year). Economic revenues from dive tourism showed improvement of 50% in 2014 compared to 2013. There are more divers from other countries than nationals. This activity provides jobs and benefits especially the communities of the Pacific coast, the poorest in the country but some operators are located in other countries.

Summary of benefits

The Malpelo FFS is of major importance for conservation and research, and serves as an aggregation, reproduction, breeding and nursery site for numerous marine species that are of great importance for the Eastern Tropical Pacific fisheries and to preserve the global biodiversity. The large predators and pelagic species are the basis for the high-end diving tourism, which brings economic and social benefits. It is a pristine key-site, considering ecosystem connectivity through the Eastern Tropical Pacific Marine Corridor.

Projects

Compilation of active conservation projects

№	Organization/ individuals	Project duration	Brief description of Active Projects
1	Colombian Navy		Patrol boat and personnel for law enforcement.
2	Conservation International, Fundación Malpelo, Asociación Calidris and Universities		Support for participation in activities related to the Eastern Tropical Pacific Seascape (ETPS) to coordinate conservation policies, research, and management, and facilitate information exchange.
3	Environmental Action Fund of Colombia		Annual contribution of more than US$230,000 per year (proceeds from the Malpelo Endowment Fund) to support management. Endowment manager.
4	Fundación Malpelo		Hammerhead shark research (funding from CI-FA Malpelo Endowment); development of management effectiveness and conservation (funded by Conservation International ETPS).
5	Conservation International		Strengthening fisheries management in the Eastern Pacific Tropical Seascape : reducing IUU fishing in four MPAs (Cocos, Malpelo, Galapagos and Coiba) by strengthening the fisheries enforcement chain (detection, interdiction and prosecution) and improving policy frameworks (policy and institutional capacity strengthening, information systems building, communication and outreach)
6	MigraMar		Science for the Conservation of Marine Migratory Species in the Eastern Pacific
7	Fundación Biodiversa Colombia		Seeks the conservation of the Colombian Natural Heritage through scientific research with social involvement and through sustainable productive projects that contribute to conservation, to social development and to self-sustainability of local communities.

Compilation of potential site needs

№	Site need title	Brief description of potential site needs	Support needed for following years
1	CMAR	Consolidation of intergovernmental efforts at the regional level of the Eastern Tropical Pacific.	

№	Site need title	Brief description of potential site needs	Support needed for following years
2	.	Increased monitoring and law enforcement.	
3	N.A.	Research in the poorly known deeper areas, including seamounts of the underwater Malpelo Range to better understand the marine system.	

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