



WWF

REPORT

2019

TOWARDS 2020

HOW MEDITERRANEAN COUNTRIES ARE
PERFORMING TO PROTECT THEIR SEA



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Coordinated by
Marina Gomei, WWF

WWF consulting organization
European Topic Centre for Spatial Analysis and Synthesis (ETC-UMA) of the University of Malaga, Spain

Communications
Stefania Campogianni, WWF

Design/Layout/Infographics
Blueverde Studio SL

Editing
Barney Jeffries
Catherine Roberts

Front cover photograph
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FOREWORD

The catastrophic climate and nature crises are leading us towards a planetary emergency. Failure to address these crises is no longer an option. They risk undermining the development gains of the last few decades and threaten the achievement of the 2030 Agenda. Over the last year, the international scientific community has raised the alarm and has shown that we face not only a climate crisis, but also a nature and human development crises.

Oceans are already facing this reality and the Mediterranean Sea has been on the verge of “burn out” for decades now. Unsustainable uses of the sea and broken governance have put to danger the health and prosperity of the Mediterranean for future generations. Not only do we risk losing the diversity of the region’s biodiversity, but we also threaten the livelihoods of all those that depend on a healthy planet.

To date, countries around the world, including the Mediterranean region, failed to make significant progress towards the creation of an adequate network of marine protected areas (MPAs) by 2020, a target set by the Convention on Biological Diversity (Aichi Target 11). The results of this report are proof that we are far from a functioning and connected network of MPAs that would reduce the negative impact of human activities and climate change and halt the loss of biodiversity.

2020 provides a momentous opportunity to reverse the trends and turn the tide on unsustainable exploitation of our oceans. There is an undeniable momentum to put nature and oceans on top of the international agenda. With a new Oceans treaty set to be negotiated, alongside agreements on a new global biodiversity framework, action on climate change, and a renewed commitment to the environment under the Sustainable Development Goals, in 2020 we must secure a New Deal for Nature and People that places us on the path to stabilizing the climate, and restoring nature within a decade.

We must act now in a concerted effort, backed by political will, engaged local communities, mobilised civil society and responsible private sector, to ensure the future of the Mediterranean. It is time to translate words and commitments into concrete and measurable actions. The window of opportunity is limited and if we do not seize the chance now, we won’t be able to bend the curb.



Marco Lambertini, Director General,
WWF International



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EXECUTIVE SUMMARY

For thousands of years, the Mediterranean Sea - with its exceptional diversity of marine and coastal ecosystems - has enabled the flourishing of a rich culture, trade and development. However, ongoing unsustainable fishing, tourism, plastic and chemical pollution, and rapid coastal development are causing the dramatic decrease and loss of marine species and the destruction of fragile habitats. The increasing effects of climate change and future trends of development at sea are further threatening the ecological and economic resilience of the whole region.

Ignoring this puts the health, well-being and prosperity of the people living along the coasts of the region under threat. The economic assets generated by the Mediterranean Sea are valued at around US\$5.6 trillion. Decisive action to bend the curve on nature loss is needed to protect our natural capital and secure the future of the next generations.

A decade ago, Mediterranean countries signed the CBD Aichi Target 11 committing to protect at least 10% of their waters with the creation of effective Marine Protected Areas (MPAs).

Today, one year before the 2020 deadline, WWF has commissioned a comparative analysis of the actions Mediterranean (EU and non-EU) countries have taken in implementing conservation policies and creating an effective and well-managed network of marine protected areas.

The results are far from encouraging:

- Currently, approximately 9.68% of the Mediterranean Sea has been designated as MPAs, but mainly in the northern part of the basin or with small paper parks.
- In the past 10 years, most countries have made no effort to designate additional areas. A large part of the increase in MPA cover is due to France and Spain with a small contribution from Albania, Croatia, Greece and Malta. A very small surface of new MPAs was designated in Egypt, Italy, Slovenia, and Turkey.
- Only 2.48% of the Mediterranean is covered by MPAs with a management plan, only 1.27% by MPAs that effectively implement their management plans, and a tiny 0.03% is covered by fully protected areas. Most of the Mediterranean is left unprotected.
- Mediterranean MPAs are not part of an ecologically, representative and well-connected system of protected areas.

9.68%

of the Mediterranean Sea has been designated as MPAs, but mainly in the northern Mediterranean and by creating small paper parks

2.48%

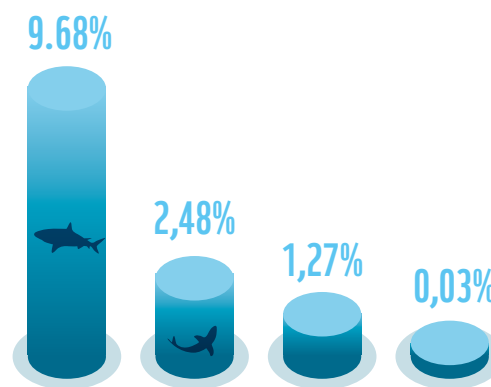
of the Mediterranean Sea is covered by MPAs with a management plan

1.27%

of the Mediterranean Sea is covered by MPAs that effectively implement their management plans

0.03%

of the Mediterranean is covered by fully-protected areas



To reverse the current trend and restore the health of our sea, in 2020 Mediterranean countries must adopt a New Deal for Nature and People to put biodiversity, climate protection, and sustainability at the core of any future political and economic agenda.


To achieve this New Deal, Mediterranean countries should commit to a more ambitious post-2020 Biodiversity Framework in the context of the Convention for Biological Diversity (CBD), while endorsing a more robust and measurable Strategic Action Plan on Biodiversity (SAP/BIO) of the Barcelona Convention.

Specifically, the new post-2020 Biodiversity framework should include:

- 1. MORE AMBITIOUS PROTECTION TARGETS:**
increased conservation targets to protect at least 30% of coastal and marine areas, especially under-represented areas of particular importance for biodiversity and ecosystem services.
- 2. STRONGER QUALITATIVE REQUIREMENTS:**
measurable indicators of effectiveness, clear thresholds for fully protected MPAs, representativeness and connectivity of MPA networks, inclusiveness and participation of stakeholders.
- 3. MECHANISMS OF ACCOUNTABILITY:**
more robust, transparent, SMART mechanisms to monitor country progress.
- 4. INTEGRATION OF MPAS INTO WIDER SUSTAINABLE SEASCAPE MANAGEMENT:**
a coherent network of MPAs is fundamental for the achievement of ecosystem-based marine spatial planning.
- 5. GOOD GOVERNANCE WITHIN AND BEYOND TERRITORIAL WATERS:**
enhanced cross-sectoral and cross-jurisdictional cooperation among states and across bodies, at global and regional scales.



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A diver in a black wetsuit and red fins is swimming horizontally over a dense field of green seagrass. The diver is holding a flashlight in their right hand, which illuminates the seagrass below. Bubbles are rising from the diver's breathing apparatus. The background is a clear, deep blue sea.

**THE ECONOMIC ASSETS GENERATED BY
THE MEDITERRANEAN SEA ARE VALUED AT
AROUND US\$5.6 TRILLION.**

**IGNORING THE NEGATIVE TRENDS OF BIODIVERSITY DECLINE PUTS
THE HEALTH, WELL-BEING AND PROSPERITY OF THE PEOPLE
LIVING IN THE REGION UNDER THREAT. DECISIVE ACTION TO
BEND THE CURVE ON NATURE LOSS IS NEEDED TO PROTECT OUR
NATURAL CAPITAL AND SECURE OUR FUTURE.**

1. INTRODUCTION

Mediterranean marine biodiversity at risk

For thousands of years, the Mediterranean Sea has sustained an incredible diversity of life. It has connected human societies and enabled the flourishing of a rich culture of commerce, trade and development. Today, it attracts about one-third of global tourism, accounting for a large part of the income from tourism in several bordering countries.

However, in the past few decades, unsustainable fishing, tourism, plastic and chemical pollution, and rapid coastal development have severely threatened its ecological resilience. Over the past 50 years, populations of Mediterranean marine mammals have fallen by 41% and around 80% of fish stocks are overfished. More than half (53%) of its sharks are at risk of extinction and Mediterranean seagrass *Posidonia oceanica* has decreased by 34%.¹ As shown in WWF's [MedTrends report](#), the Mediterranean region is facing a “blue gold rush” where a range of maritime activities, including wind farms, oil and gas extraction, cables, shipping routes and tourism, are predicted to expand substantially over the next 15 years.² The sea faces serious current and future threats that need to be urgently addressed, especially given that the effects of climate change and ocean acidification are exacerbating these anthropogenic stressors.



OVER THE PAST 50 YEARS

80%

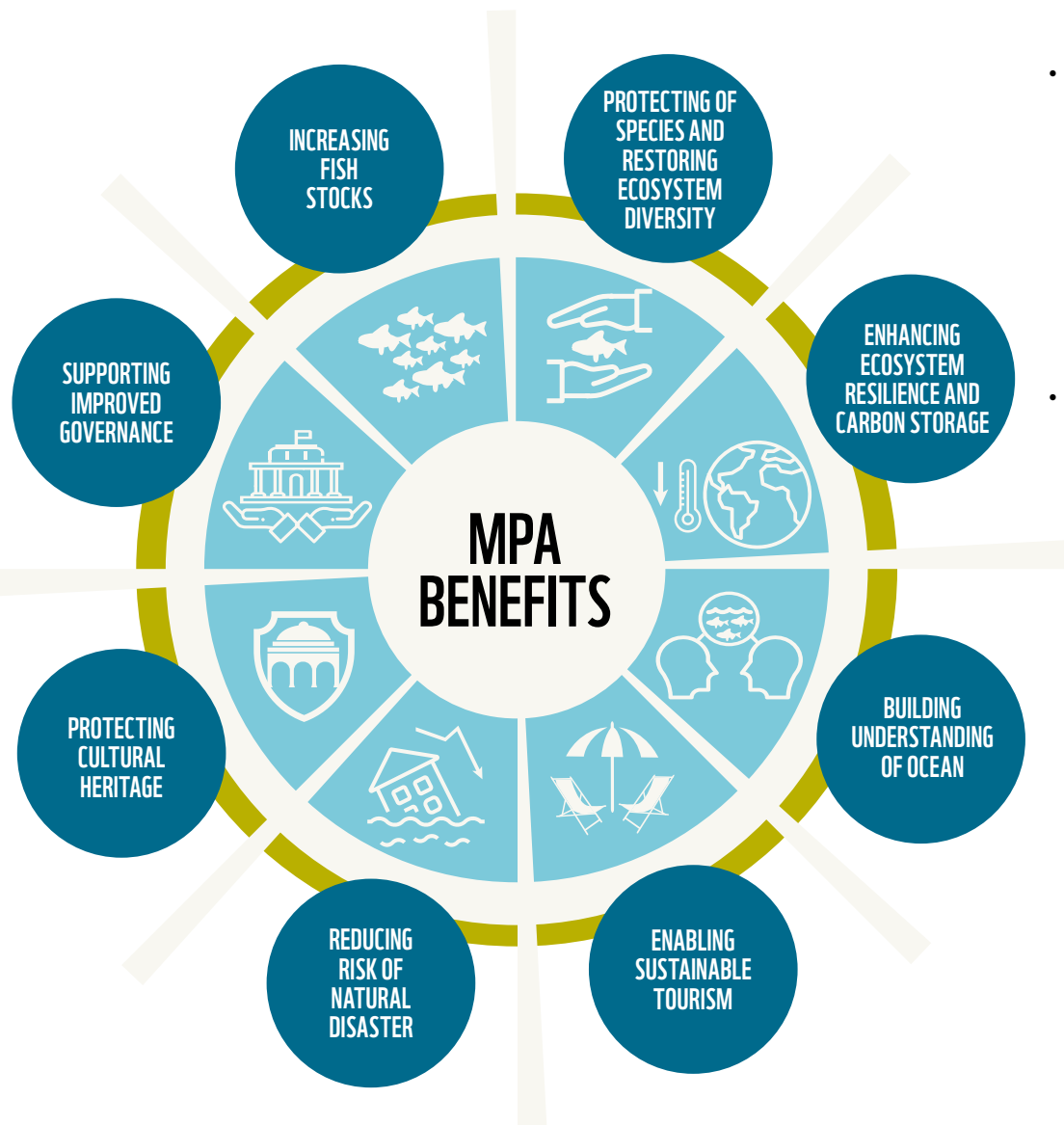
OF FISH STOCKS HAVE BECOME
OVERFISHED, MARINE MAMMALS
HAVE DECREASED BY 41% AND
POSIDONIA BY 34%

MPAs: a powerful tool to rebuild ocean health

Marine protected areas (MPAs) have emerged worldwide as an effective tool to manage and preserve biodiversity and natural resources while enhancing the socioeconomic resilience of these areas.³ An MPA may be defined as a “clearly defined geographical space, recognized, dedicated, and managed, through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values”.⁴ In the Mediterranean, multiple-use MPAs include areas that are partially protected, where certain uses and activities are allowed or regulated, and fully protected (also called no-take areas), where all extractive and destructive activities are forbidden. In crowded coastal areas, multiple-use MPAs might help reconcile habitat conservation objectives with social and economic demands.⁵

MPAs can be effective conservation tools only when key conditions are met:

- **Well-designed, managed, and enforced MPAs must also include fully protected areas (no-take zones)**⁶. There are various examples of Mediterranean MPAs producing a positive impact on marine biodiversity as well as its associated ecosystem services. A study looking at the differences in fish biomass between protected and unprotected habitats in 24 Mediterranean MPAs found, for example, that well-enforced MPAs had more than twice the biomass of fish compared to unprotected areas.⁷ Similarly, a study of 10 MPAs across Spain, France and Italy showed that well-designed, enforced and managed MPAs generated an income from fishing and scuba diving that was 2.3 times higher than the management costs.⁸ MPAs protect fish and invertebrate populations, leading to the spill-over of adults and juveniles into adjacent areas, connecting habitats, and often serving to replenish fisheries in other areas.⁹



- **MPAs must be integrated in a long-term, strategic and ecosystem-based approach to planning and managing human activities at sea.** First, if designed correctly, coherent networks of MPAs can deliver more conservation and socio-economic benefits than single MPAs in isolation, by ensuring replication and representativity of habitats and connecting regions through larval dispersal.¹⁰ Second, MPAs should be integrated into overall strategic planning that includes: approaches such as fishery reserves and multi-year plans; coastal zone management to regulate impacts from land; wider marine spatial planning; programmes for species and habitat recovery; and consideration of priority areas for conservation as Ecologically and Biologically Significant Areas (EBSAs).
- **MPAs must be designed and managed through a participatory approach** by engaging local communities, including fishers and other resource users, and by sharing the decision-making power and management responsibility among stakeholders. In the Mediterranean, several examples show that promoting co-management can increase compliance with local regulations, MPA ownership, and ultimately effective management of the site.¹¹



The legal framework: measuring country progress on biodiversity targets

A number of environmental policies guide Mediterranean countries to protect a range of coastal and marine habitats to sustain the ability of natural systems to provide the associated ecosystem services. These include:

- at international level, the Convention on Biological Diversity (CBD) and UN 2030 Agenda for Sustainable Development (the Sustainable Development Goals, or SDGs)
- at regional level, the Marine Strategic Framework and Marine Spatial Planning Directives of the European Union and the Specially Protected Areas and Biological Diversity (SPA/BD) Protocol of the UN regional Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean (Barcelona Convention).

The most important of these international conventions, the CBD, formulated the Aichi targets and national commitments in 2010, with Aichi target 11 stating that “10% of coastal and marine areas constituting an ecologically representative and well-connected network of protected areas” should be created by 2020. More precisely, Aichi target 11 refers to “ecologically representative and well-connected systems of protected areas and other effective area-based conservation measures, that would be effectively conserved and equitably managed”. Furthermore, SDG 14 states that countries should “conserve and sustainably use the oceans, seas and marine resources for sustainable development.”

Now, one year before 2020, the CBD target of effectively protecting 10% of Mediterranean marine and coastal areas remains far from being achieved.

In this report, we use a scorecard approach to assess the quantitative and qualitative progress made by individual Mediterranean countries towards achieving CBD Aichi target 11 and SDG 14. We also assess the habitat representativity, replication and connectivity of MPAs. The WWF Mediterranean Marine Initiative (MMI) MPA Scorecard is designed to inform discussions, strengthen regional environmental policies, and communicate where progress is being made and where further action is needed to meet the commitments made by the Mediterranean countries as Contracting Parties to the Barcelona Convention.






2. METHODOLOGY

What we define as a Marine Protected Area



CBD considers that both MPAs and other effective area-based conservation measures (OECMs) can contribute to Aichi target 11. During COP 14, the Parties adopted a definition for OECMs;¹² however, there is still no consensus on application and reporting.¹³

For the purpose of this publication, the term MPA:

Includes

-  Nationally designated MPAs
-  Natura 2000 sites
-  The marine part of Ramsar sites (wetlands of international importance under the Ramsar Convention)
-  The marine part of UNESCO Biosphere reserves
-  Internationally designated Specially Protected Areas of Mediterranean Importance (SPAMIs)

Does not include

-  Fishery restricted areas (FRAs) under the General Fisheries Commission for the Mediterranean (GFCM-FAO), as consensus on considering Mediterranean FRAs as MPAs has not been reached yet
-  Particularly Sensitive Sea Areas (PSSAs) under the International Maritime Organization, as those in the Mediterranean require only voluntary measures.

Rationale for specific areas included or not included in the assessment:

- The Pelagos Sanctuary for Mediterranean Marine Mammals, designated as a SPAMI, is included in the MPA designation for the whole Mediterranean, but does not appear in the calculation at national level (France, Italy, Monaco).
- Sites that have only an international status and other nationally designated MPAs or Natura 2000 sites (such as Ramsar sites, Biosphere reserves and SPAMIs in Algeria, Egypt, Spain, Tunisia and Turkey) have not been included in the country-specific statistics as no management authority is responsible for the management of the marine part.
- Countries that are not part of the Barcelona Convention are excluded from the analysis at national level; however, the Natura 2000 sites of Gibraltar have been taken into account for the assessment at Mediterranean level.
- The portion of the Finike Denizaltı Dağları Special Environmental Protection Area (SEPA) declared by Turkey in the area beyond its national jurisdiction has not been included in the assessment.

The present publication uses data up to December 2018. Although no systematic assessment has been made in all countries, it is known that a handful of MPAs have been established in 2019 in:

- Slovenia – Debeli Rtič, 1.55km², January 2019.
- Spain – enlargement of the National Park of Cabrera, 807.73km², February 2019.
- Cyprus – Peyia Sea Cave MPA, 0.52km², February 2019.
- Algeria – Cap Lindles Natural Reserve, 42.83km², April 2019.

Assessment areas and data sources

In assessing progress towards CBD Aichi target 11, we evaluated the protection of marine and coastal waters of the 21 Mediterranean countries that are parties to the Barcelona Convention. Considering that the limits of national jurisdictions in the Mediterranean Sea have not yet all been defined, delineation of the assessment was based on the spatial layers of offshore waters up to 200nm available from World EEZ v10, World 12 Nautical Miles Zone and World Internal Waters. Therefore, the country-level assessments were based on territorial waters¹⁴ (0-12nm)¹⁵ and offshore waters up to 200nm for each country.¹⁶ For Turkey (the Aegean coast) and Greece, the analysis was carried out for an area between the coastline and up to 6nm, as these countries claim a territorial sea of up to 6nm.

The MPA assessment considered the maximum spatial extent of MPAs within the Mediterranean basin using data available up to December 2018 from EU Natura 2000 and nationally designated protected areas inventories (Common Database on Designated Areas; CDDA), the MedPAN database on Mediterranean Marine Protected Areas, and the Sites of interest for the conservation of marine environment in the Mediterranean Sea (MAPAMED) MedPAN, UNEP/MAP/SPA-RAC. This data collection was validated by national experts from the WWF network who reviewed the list (see acknowledgements), removing sites that were not considered MPAs or adding protected areas that were missing from the list.

National experts from the WWF network provided information about the state of management. Data for these assessments were taken from the spatial MPA database, direct interviews and publicly available national databases (e.g. official websites).

A detailed methodology of the analysis for the policy ratification, MPA surface coverage, implementation of management plans, and ecological coherence of the MPA network is available online: wwfmmi.org.

Indicators of MPA management

The state of management and monitoring of MPAs in every country was assessed using three indicators:



3. RESULTS: COUNTRIES' PERFORMANCE TOWARDS 10% PROTECTION

3.1 Ratification of international commitments

Most Mediterranean countries have still not transposed international and regional policy commitments into national laws.

Global and regional policies that are relevant to designating MPAs in Mediterranean countries were reviewed. Only Albania, France, Morocco and Spain scored 100% on their policy assessment. Bosnia and Herzegovina, Cyprus, Greece, Israel, Libya and Monaco scored very poorly, with 50% or less of assessed commitments ratified.

The other 13 countries also scored quite poorly (below 83%) for two reasons:

1. because they have yet to translate into national legislation the updated 1995 Specially Protected Areas and Biological Diversity (SPA/BD) Protocol, the key protocol of the Barcelona Convention related to the creation of MPAs in territorial waters and open sea, or
2. they failed to deliver the 6th National Report required under the CBD. Specifically, Bosnia and Herzegovina, Cyprus, Greece, Israel, Lebanon, Libya and Montenegro still have to ratify the SPA/BD Protocol (Table 1).

Regardless of the score, countries have not yet followed through with the commitments they made under the CBD and Barcelona Convention.



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TABLE 1: ASSESSMENT OF THE STATUS OF RATIFICATION OF POLICY COMMITMENTS

Country	CBD			Barcelona Convention			Total policy score	
	CBD ratification	National Biodiversity Strategy and Action Plans	Delivery of the 6th National Report	Entering into force	SPA & Biodiversity Protocol	ICZM Protocol	% of achievement	TOTAL SCORE
Albania	1	1	1	1	1	1	100	3
Algeria	1	1	1	1	1	0	83	2
B&H	1	1	1	0	0	0	50	1
Croatia	1	1	0	1	1	1	83	2
Cyprus	1	0	0	1	1	0	50	1
Egypt	1	1	1	1	1	0	83	2
France	1	1	1	1	1	1	100	3
Greece	1	1	0	1	0	0	50	1
Israel	1	0	0	1	0	1	50	1
Italy	1	1	1	1	1	0	83	2
Lebanon	1	1	1	1	0	1	83	2
Libya	1	0	0	1	0	0	33	0
Malta	1	1	0	1	1	1	83	2
Monaco	1	0	0	1	1	0	50	1
Montenegro	1	1	1	1	0	1	83	2
Morocco	1	1	1	1	1	1	100	3
Slovenia	1	0	0	1	1	1	66	2
Spain	1	1	1	1	1	1	100	3
Syria	1	0	0	1	1	1	66	2
Tunisia	1	1	1	1	1	0	83	2
Turkey	1	1	0	1	1	0	66	2

Scoring: Yes = 1, No = 0

<50% = 0 50% = 1 51-99% = 2 100% = 3

3.2 MPA designation at the regional level

Since 2010, most countries have made minimal progress and have not met the CBD Aichi commitments.

Currently, approximately 9.68% of the Mediterranean Sea, or 245,950 km², has been designated as MPAs, but mainly in the northern Mediterranean (Map 1). While this implies that the region has almost reached the Aichi target to designate at least 10%

of the marine ecoregion, a large part of the southern part of the Mediterranean is left unprotected and the vast majority of protected areas are only paper parks, lacking any management and monitoring systems (see section 3.3 on p. 19).



MAP 1: CURRENTLY DESIGNATED MPAS IN THE MEDITERRANEAN

- Natura 2000 sites
(91,090 KM², 3.58%)
- SPAMIs
(90,235 KM², 3.55%)
- National MPAs
(82,421 KM², 3.24%)*
- Ramsar sites
(3,003 KM², 0.12%)
- Biosphere reserves
(934 KM², 0.04%)
- National territorial waters

(MAXIMUM SURFACE OF MPAS:
245,950 KM² ** - 9.68% OF MEDITERRANEAN SEA)

* Area in km², percent of total Mediterranean Sea surface area.
** The same area can be covered by multiple designations.
Maximum surface of MPAs represented the total effective surface designated as MPA regardless of the type of designation.

Source: ETC-UMA, 2019 | Origin of data: MAPA-MED 2017, EEA, 2018; WWF, 2019, ETC-UMA, 2019 | Land and country boundaries. EUROSTAT, 2018 | Maritime Boundaries and Exclusive Economic Zones (200NM), Flanders Marine Institute, 2018

TABLE 2: ASSESSMENT OF PROGRESS AGAINST MPA TARGET OF 10% COVERAGE

Country	MPA areas within territorial waters (0-12 nautical miles)		MPA areas in offshore waters (0-200 nautical miles)	
	% of MPA area	Score	% of MPA area	Score
Albania	3.1	0	1.57	0
Algeria	0.12	0	0.03	0
Bosnia and Herzegovina	0	0	0	0
Croatia	15.78	2	9.02	1
Cyprus	0.86	0	0.13	0
Egypt	1.38	0	0.19	0
France	52.25	3	29.93	2
Greece	20.07	2	4.69	0
Israel	0.68	0	0.11	0
Italy	19.12	2	5.57	1
Lebanon	0.87	0	0.2	0
Libya	0.1	0	0.1	0
Malta	62.56	3	7.83	1
Monaco	0.31	0	0.31	0
Montenegro	1.15	0	0.41	0
Morocco	4.33	0	2.06	0
Slovenia	4.88	0	4.88	0
Spain	41.32	3	26.95	2
Syria	0.1	0	0.1	0
Tunisia	0	0	0	0
Turkey	6.77	1	3.38	0

Scoring: 0-5% = 0 5-9% = 1 10-29% = 2 >30% = 3

In specific areas of the Mediterranean, the marine surface area designated as MPAs has increased substantially over the past decade (Fig.1). However, one year away from the 2020 deadline, the vast majority of Mediterranean countries have not fulfilled the CBD Aichi target to designate at least 10% of their territorial and offshore waters as MPAs (Fig.1, Table 2). Results are intended to provide both the actual situation within national jurisdictions as well as the theoretical space, within the Barcelona Convention framework, where countries should protect the sea.

France and **Spain** are the top-ranked countries as of 2018, having designated 26.9-29.9% of their territorial and offshore waters as MPAs.

Greece protected 20% of its territorial waters up to 12nm, but this percentage drops to 4.7% when considering offshore waters up to 200nm.

Croatia is close to achieving its goals in the open sea, with 9% of the 0-200nm marine area designated as MPAs, and has protected 15.7% of its territorial waters.

Italy and **Malta** designated more than 10% of MPAs only within their territorial waters (0-12nm).

The other 15 Mediterranean countries are far from achieving their target for marine protection (Fig.1, Table 2). In particular, Bosnia and Herzegovina has not designated any MPAs, Montenegro gazetted only one MPA under a municipal regulation, and in Tunisia MPAs are not yet officially designated (as the implementing decree related to identified MPAs is still lacking).

The rate of MPA designation over time is an indicator of countries' progress from the last commitment to the Aichi target. A large part of the increase in MPA coverage in the Mediterranean over the last 10 years is due to France and Spain. Most other countries, with the exception of Albania, Croatia, Greece and Malta, have not made any effort to increase their area designations in the past 10 years. A very small surface of MPAs was also designated in Egypt, Italy, Slovenia, and Turkey. Looking at the EU countries, most of the new MPAs in Croatia, Greece and Spain (aside from the Cetacean corridor established in 2018) are Natura 2000 sites, established under the binding legislation of the European Birds and Habitats Directives (Fig. 2).

FIG. 1: EVOLUTION OF MPA DESIGNATION SINCE 2010 WITHIN 200NM

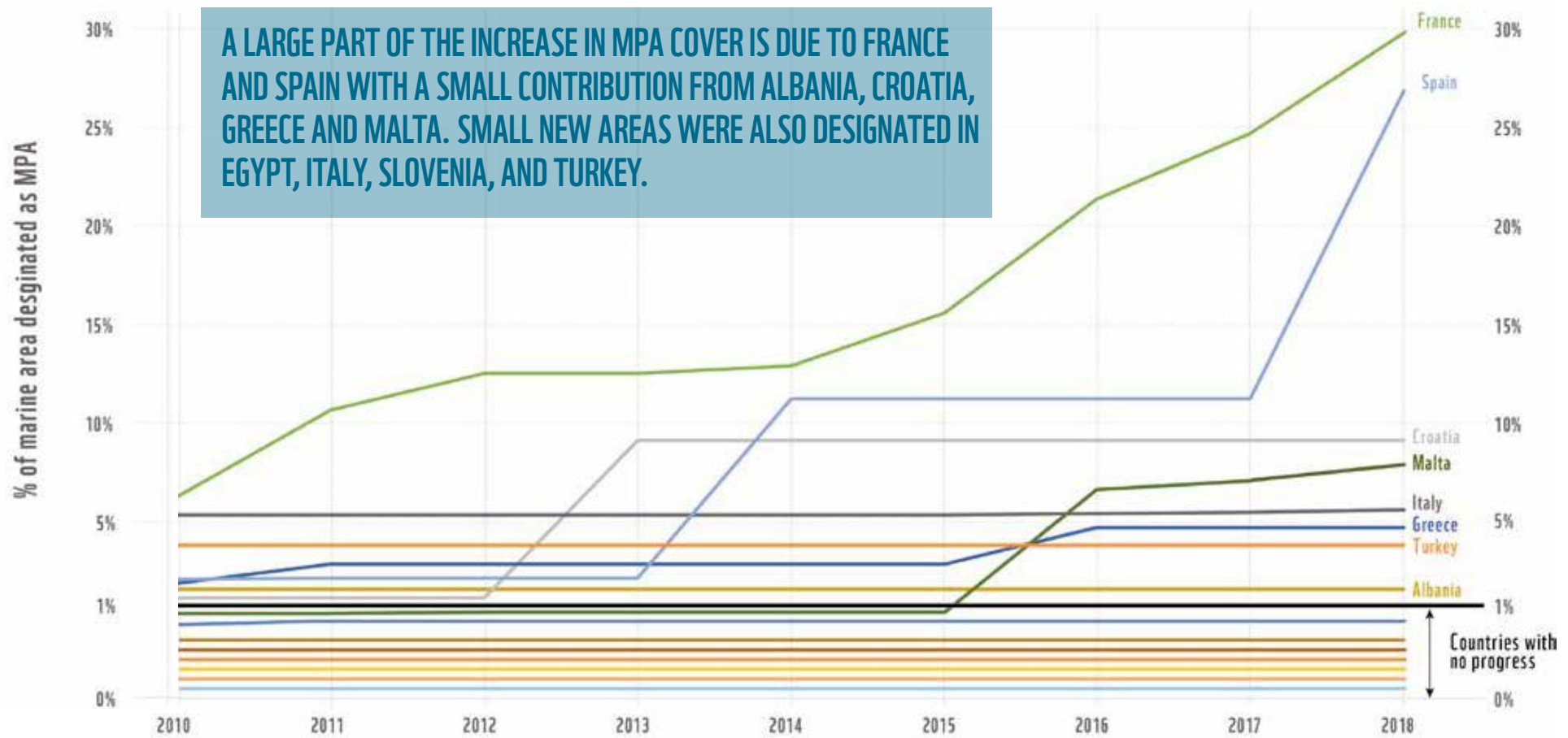
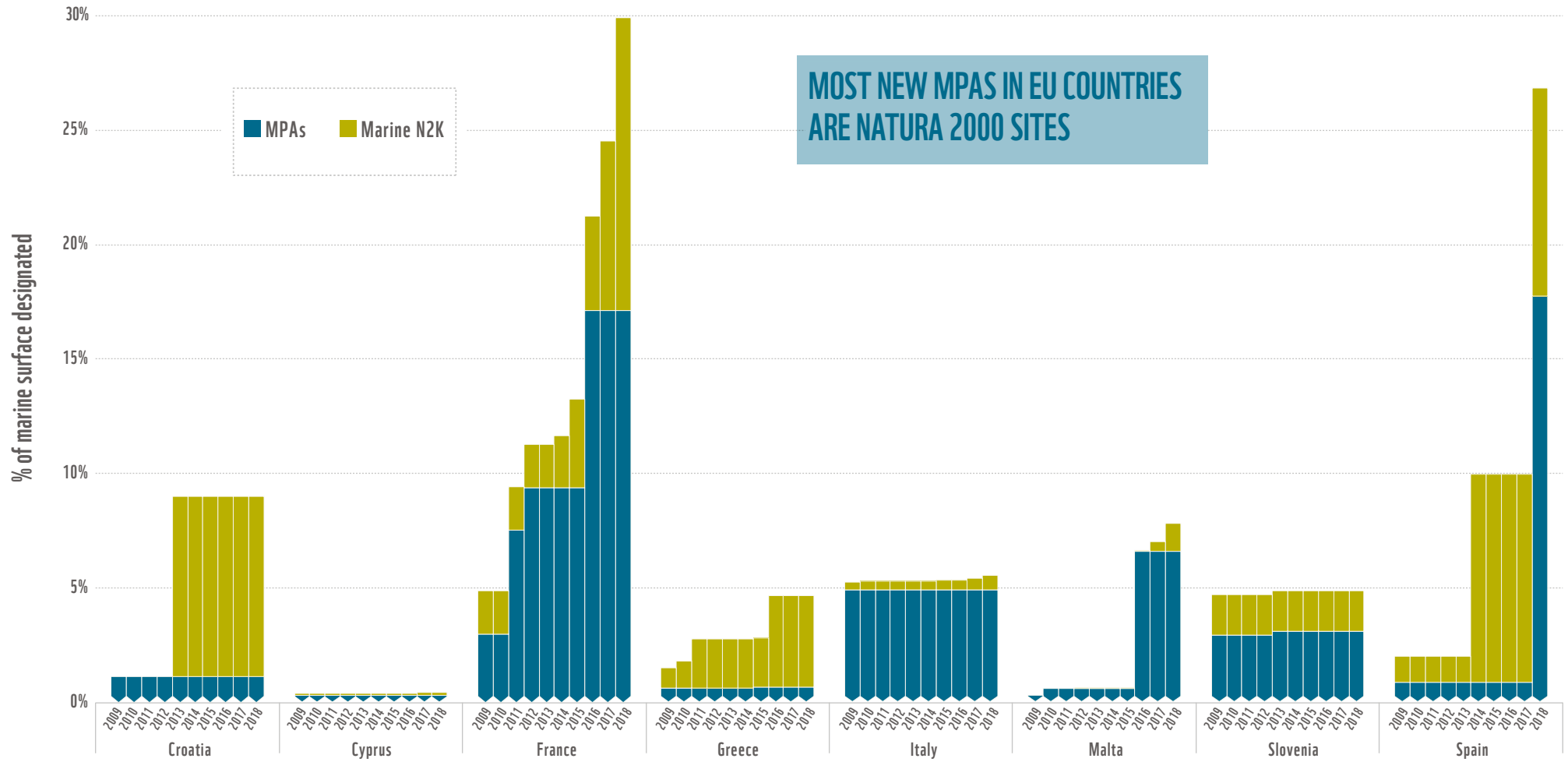
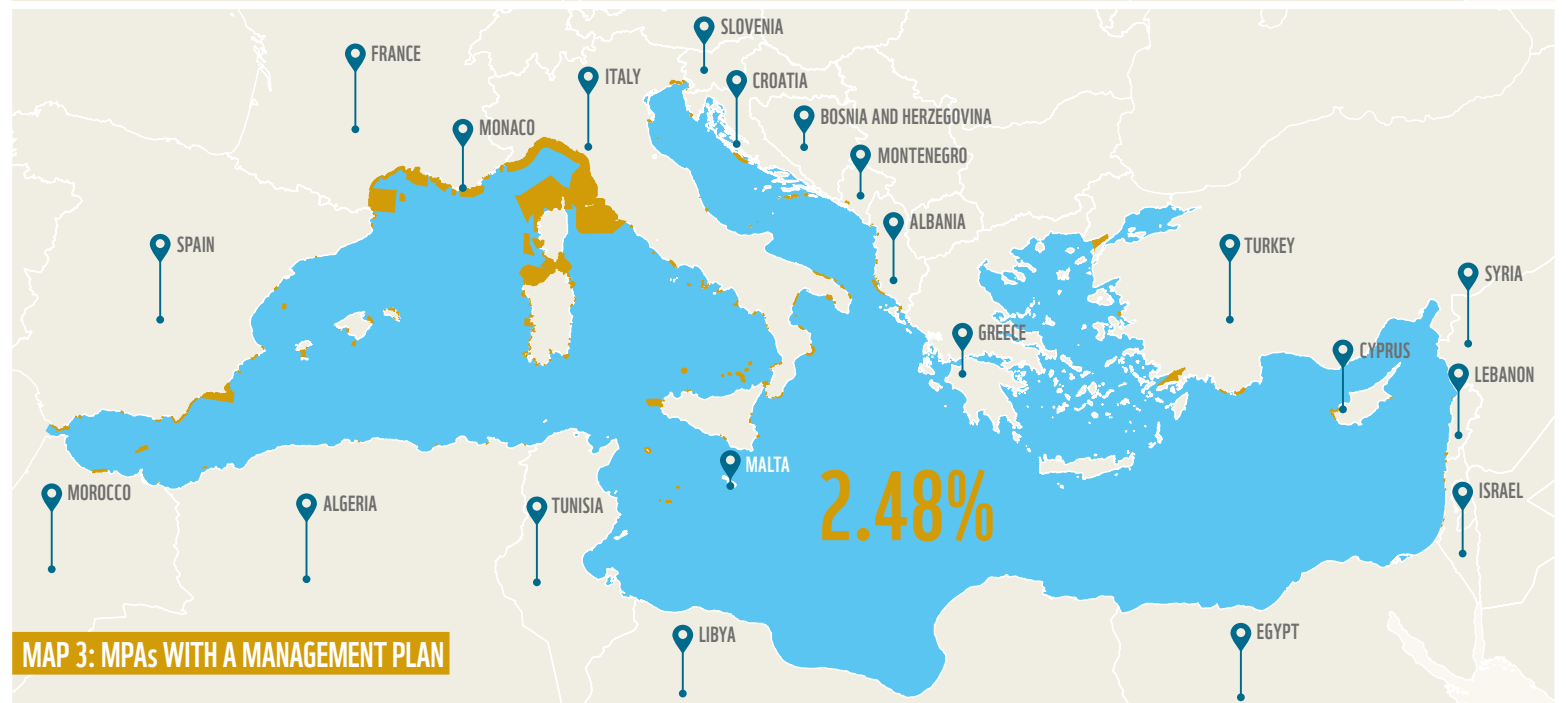
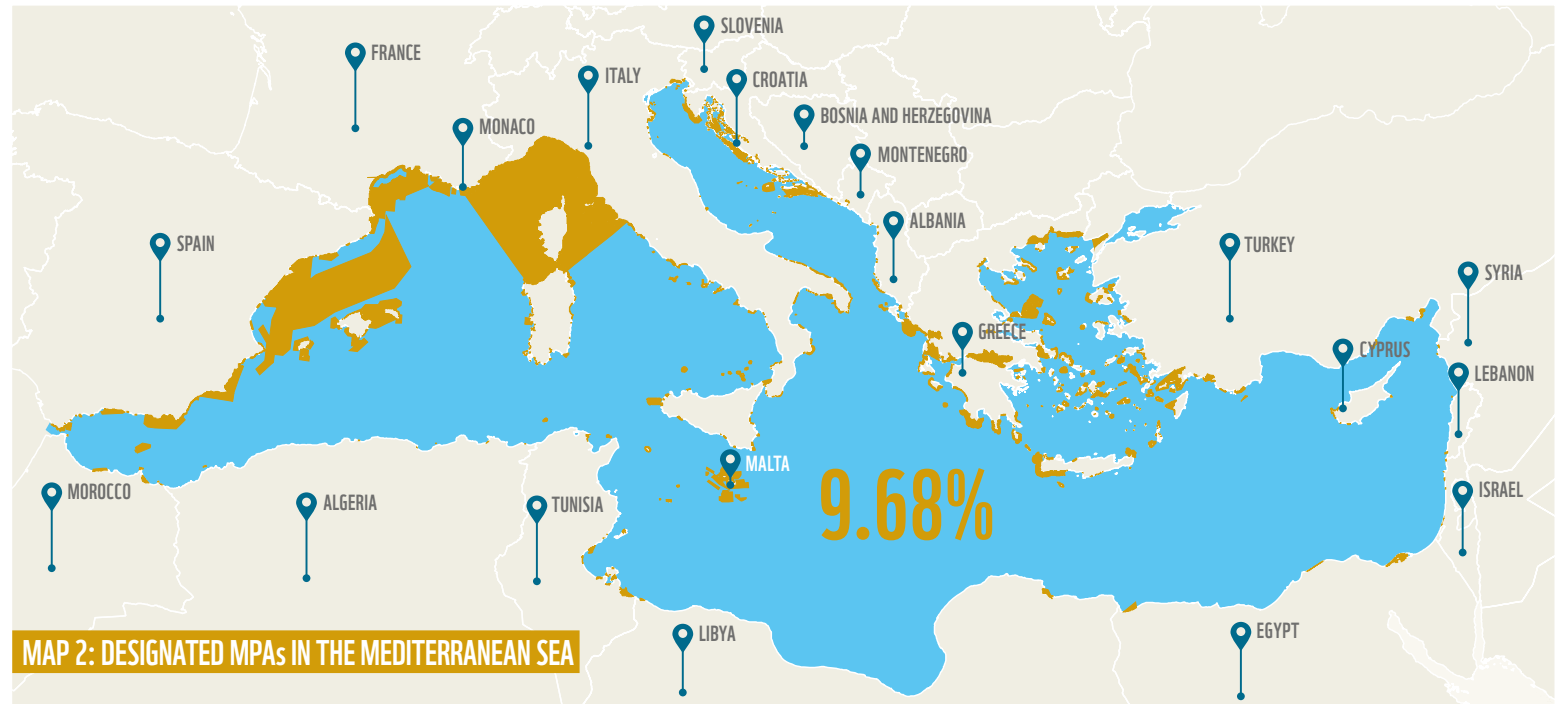


FIG. 2: EVOLUTION OF MPA AND NATURA 2000 DESIGNATION IN MEDITERRANEAN EU MEMBER STATES



BEHIND THE SCENES: MAINLY PAPER PARKS

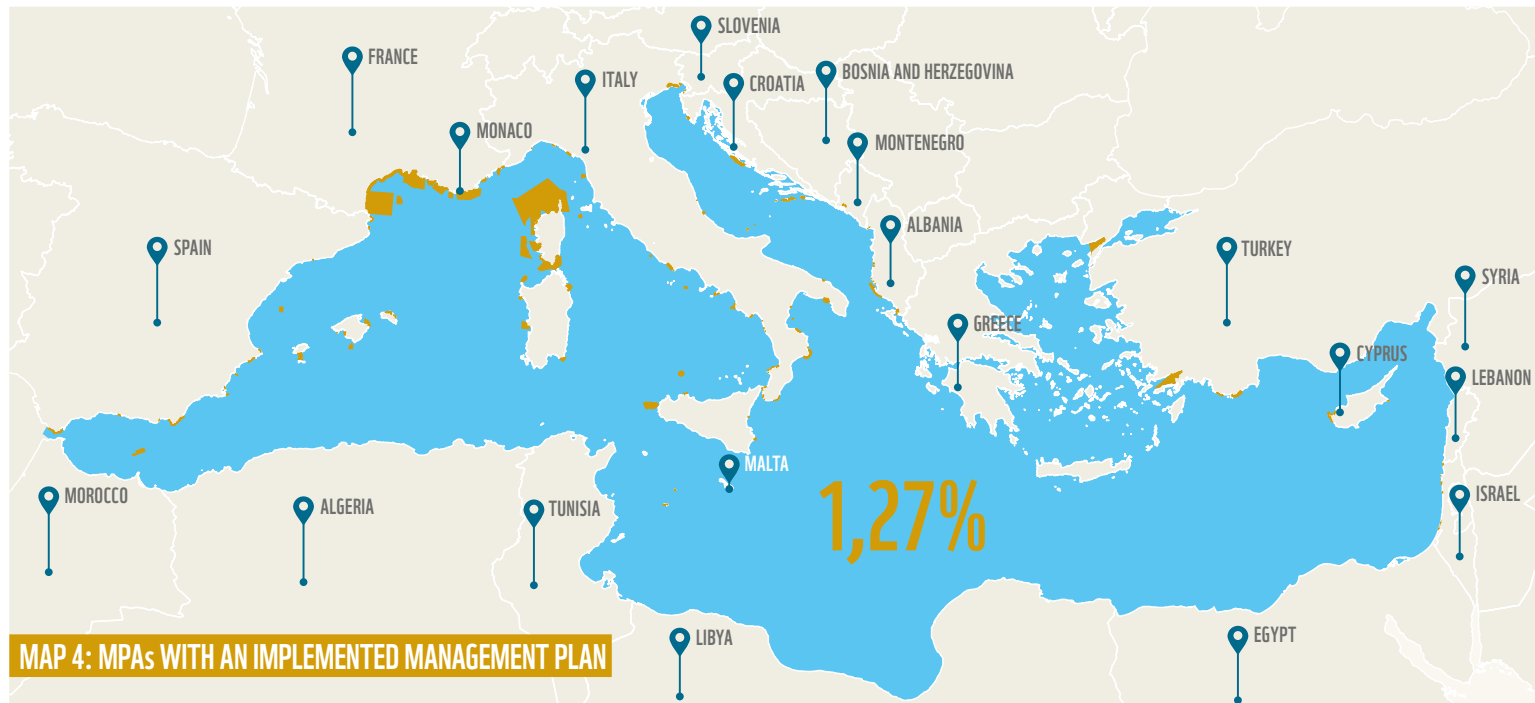


3.3 MPA management implementation

MPA management in the Mediterranean is severely inadequate.

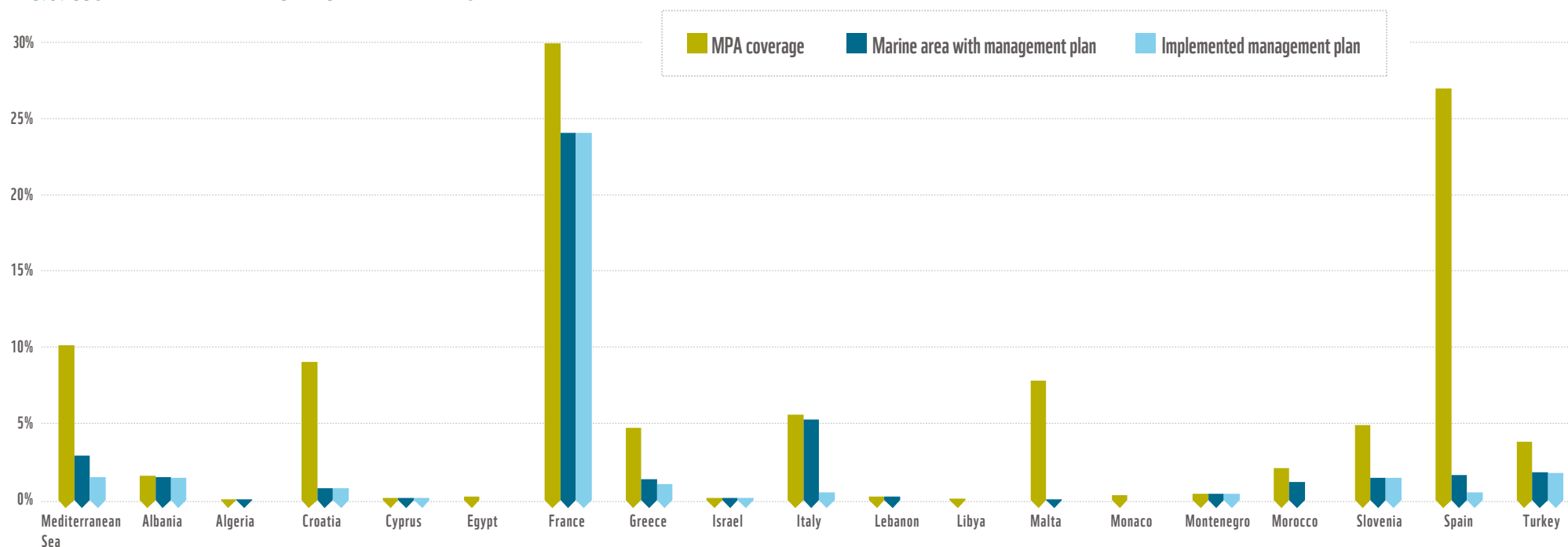
For each designated MPA, we assessed the existence of a formally adopted management plan, whether the actions included in the management plan had actually been implemented, and whether monitoring plans were carried out.

The three maps (Maps 2, 3 and 4) show that the surface of the Mediterranean Sea covered by MPAs that effectively ensure conservation of marine ecosystems is tiny. Only 2.48% of the Mediterranean is covered by MPAs with a management plan and only 1.27% is effectively protected with a properly implemented and monitored management plan. The current protection is clearly insufficient to reduce even minimally the ongoing trend of biodiversity loss.



Source: ETC-UMA | Origin of the data: MAPAMED 2017, MedPAN 2017, EEA 2018, WWF 2019 | Land and country boundaries: EUROSTAT 2018.

FIG. 3: COUNTRY-LEVEL BREAKDOWN OF MARINE AREAS



On a country-by-country basis, it is clear that with the exception of **France**, and Italy within its territorial waters, countries are failing to designate and properly manage at least 10% of their marine areas. (Fig. 3).

With the exception of very small and few MPAs, Mediterranean countries are not implementing management or monitoring of any kind in existing MPAs. (Fig. 3 and Table 3). Country scores related to MPA management and management implementation are equally very low across the Mediterranean, considering both the territorial waters and the hypothetical calculation in the open sea. **Italy** developed a management plan and implemented monitoring plans for most MPAs, covering more than 10% of its territorial waters. However, Italy was awarded a score of only 1 as it has implemented management plans for only a few nationally designated MPAs.

The rest of the countries scored on average 0. Notably, **Spain**, a country with one of the largest areas designated as MPAs, had an average score of 0, as it has no management/monitoring plans in place yet in designated Natura 2000 sites. **Greece** designated a large percentage of its national waters as MPAs but as it has no management plans in place yet the management score is 0. Management measures and annual action plans are implemented in some MPAs. **Slovenia** implemented management and monitoring plans for its small MPAs, the majority of Natura 2000 sites still have to develop a management plan. **Croatia** also scored 0, as most of the Natura 2000 sites declared were recently designated sites with no management plans, whereas management and monitoring plans have been implemented in nationally designated MPAs.

TABLE 3: ASSESSMENT OF COUNTRIES' PROGRESS AGAINST TARGET OF EFFECTIVE PROTECTION

Country	% of marine surface covered by MPAs (0-12nm)			AVERAGE SCORE	% of marine surface covered by MPAs (0-200 nm)			AVERAGE SCORE
	% with management plan	% with implemented management plan	% with monitoring programme		% with management plan	% with implemented management plan	% with monitoring programme	
Albania	2.97	2.82	3.10	0	1.5	1.4	1.6	0
Algeria	0.15	0	0	0	0	0	0	0
Bosnia and Herzegovina	0	0	0	0	0	0	0	0
Croatia	1.30	1.30	1.30	0	0.7	0.7	0.7	0
Cyprus	0.69	0.69	0.69	0	0.1	0.1	0.1	0
Egypt	0	0	0	0	0	0	0	0
France	46.42	42.41	33.06	3	24.1	24	27.9	2
Greece	0	0	4.33	0	1.3	1	1	0
Israel	0.68	0.68	0.68	0	0.1	0.1	0.1	0
Italy	18.04	1.67	17.36	1	5.3	0.5	5.1	1
Lebanon	0.87	0	0	0	0.2	0	0	0
Libya	0	0	0	0	0	0	0	0
Malta	0.02	0	0	0	0	0	0	0
Monaco	0	0	0	0	0	0	0	0
Montenegro	1.13	1.13	1.13	0	0.4	0.4	0.4	0
Morocco	2.46	0	2.46	0	1.2	0	1.2	0
Slovenia	1.45	1.45	1.45	0	1.5	1.5	1.5	0
Spain	5.14	1.97	4.90	0	1.6	0.5	0.5	0
Syria	0	0	0	0	0	0	0	0
Tunisia	0	0	0	0	0	0	0	0
Turkey	3.18	3.08	3.91	0	1.8	1.7	2.2	0

Scoring: 0-5% = 0 5-9% = 1 10-29% = 2 >30% = 3

Albania, Cyprus, Israel, and Turkey established few and/or very small MPAs. These countries developed and implemented management plans for some of their MPAs or have monitoring programmes in place. **Algeria and Morocco** created only one MPA each. The two MPAs of **Lebanon** have very old management plans which have not been implemented. **Malta** has not yet finalised the development of the management plans for its MPAs. **Montenegro** has a marine area partially protected by municipal regulations.

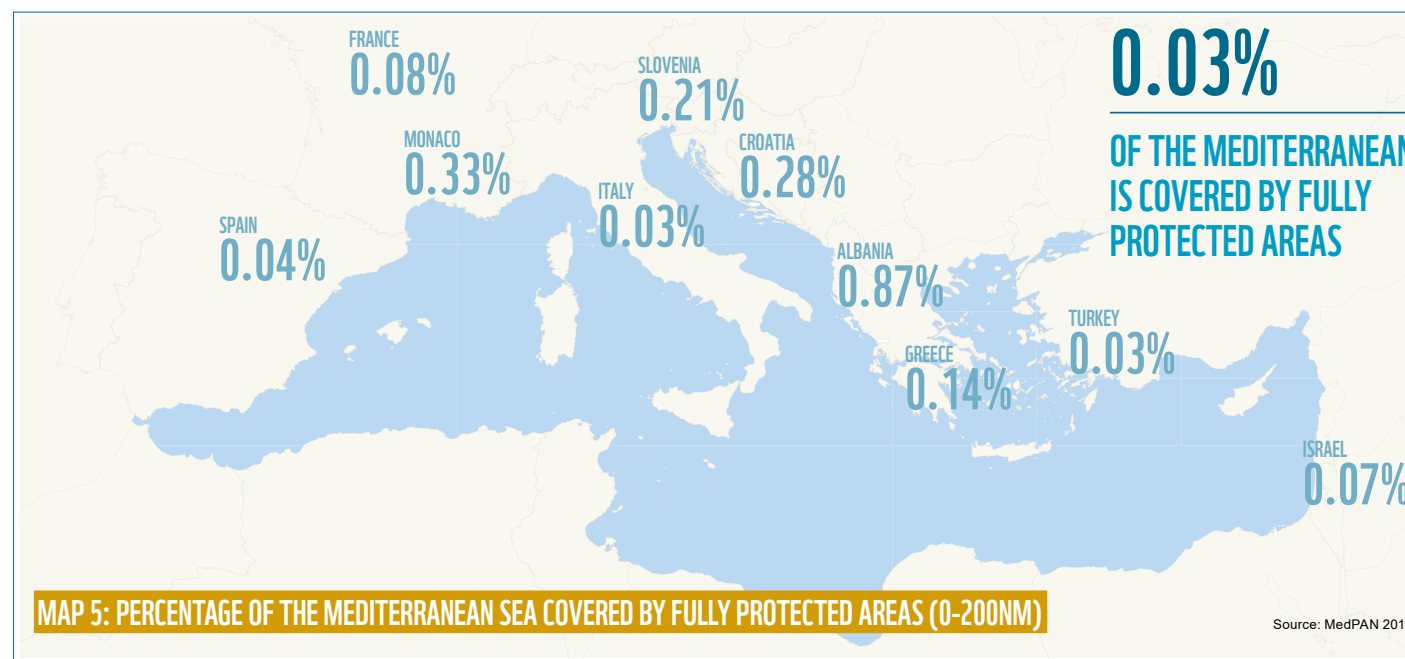
Egypt, Libya, Monaco and Syria are not managing any marine areas. In **Tunisia**, partial management is implemented at a few sites identified as future MPAs.

The results of a number of countries reflect efforts to monitor within protected areas. However, no information is available as to whether monitoring activities refer to the proper assessment of MPA effectiveness and data collection for MPA management, or whether monitoring is related to specific and time-bound research activities.

3.4 Fully protected areas

MPAs are created to protect, manage and, eventually, recover marine biodiversity. Scientists have proved that only well-designed and well-enforced MPAs that include fully protected/no-take zones can reach this goal.¹⁷ Fully protected areas or “marine reserves”, where all extractive activities are forbidden, are the core of MPAs.

Only 0.03% of the Mediterranean Sea’s area has been designated as fully protected (Map 5). Algeria, Bosnia and Herzegovina, Cyprus, Egypt, Lebanon, Libya, Malta, Montenegro, Morocco, Syria and Tunisia do not yet have any official fully protected areas.



FROM THE MPAs: SUCCESSES AND FAILURES IN MANAGING OUR MARINE RESOURCES

1 With innovation and inclusiveness, Gyaros contrasts MPA shortcomings in Greece

In Greece, most MPAs are missing long-term and legally binding regulations to assess and reduce the impact of human activities. To revert the trend, WWF and partners developed a new MPA in the Natura 2000 site of Gyaros, with a fully participatory approach and the use of innovative monitoring technologies as key assets.



2 A success story: Spain's long-term effort is delivering an effective network of MPAs

Led by the government and involving all relevant partners working on MPAs, the Intemares is the largest EU-funded project on marine conservation. This ongoing project is already a reference model on how to develop an ecologically coherent system of MPAs, designed by engaging stakeholders at all levels.



3 Turkey's inefficient centralised system leaves MPAs powerless

Turkey has built a highly centralized governance system for MPAs that is clearly not working in protecting its vulnerable marine ecosystem: MPAs have no on-site management units, and almost zero budget for patrolling boats and monitoring activities. Setting up robust management units and dedicated budgets for each MPA in Turkey is a priority to increase the effectiveness of Turkey's MPA network.



4 Not paper parks... but parks without paper in Tunisia

While in many Mediterranean countries MPAs are designated but not properly managed, in Tunisia the opposite happens: local stakeholders join forces to manage marine areas that are still waiting for the needed long-term legal recognition.



A more detailed description of the four studies is available on pages 29-35.



3.5 Ecological coherence of the MPA network

The ecological coherence of MPAs was determined by the diversity of habitats protected, as assessed by habitat representativity, replication and connectivity. High habitat connectivity and representation in an MPA network is indicative of the diversity of ecological processes that are being protected in the area.

Overall, the current MPA system is basically the same as 10 years ago and still not representative of the eight ecoregions of the Mediterranean.¹⁸ Specifically, Mediterranean MPAs are not achieving the Aichi target's requirement to conserve the sea through ecologically representative and well-connected systems of protected areas, as the three parameters for assessing ecological coherence have not been met:

- **Representativity:** only three habitats, mainly iconic or emblematic to Mediterranean coasts – infralittoral hard substrates (namely on rocky shallow shores), Posidonia seagrass meadows, and Mediterranean coralligenous habitats – are well represented. However, these habitats do not reach the 30% threshold of sufficient representativeness and are only represented in the northern part of the basin. All other habitats have low representation.
- **Replication:** More than 70% of Mediterranean habitat types reach the threshold occurring at least four times within the MPA network. Of these, the infralittoral soft and mixed substrates, Mediterranean biocoenosis and Posidonia meadows are the only well-replicated habitats. In contrast, deep circalittoral soft and mixed substrates have zero replication across protected areas, potentially because these are not nearshore habitats or because they exist only in certain regions.
- **Connectivity:** only 13% of habitat types (infralittoral soft and mixed substrates, Mediterranean biocenosis and Mediterranean Posidonia habitat superclass) can be considered well connected (with over 20 connections). Least-connected habitats are abyssal soft and mixed substrates, circalittoral habitat, deep-sea beds and deep-sea hard substrate habitats. Most of the connections between MPAs are in the northern Mediterranean.

4. CONCLUSIONS

One year short of the deadline, 15 out of 21 countries are far from achieving CBD Aichi target 11 to designate at least 10% of their territorial waters as protected areas by 2020. More dramatically, only 2.48% of the Mediterranean is covered by MPAs with a management plan, only 1.27% by MPAs that effectively implement their management plan, and only 0.03% by fully protected areas.

Despite the fact that all Mediterranean countries adopted legislation for the protection of the marine environment,¹⁹ designating MPAs and managing them effectively is still a major challenge for most countries. Lobbying and economic interests that oppose marine protection remain too powerful, while the capacity of administrations is still not sufficient to manage the MPA system effectively and decision-makers are lacking the long-term vision to tackle the biodiversity crisis.²⁰ Despite nearly two decades of global, regional and national commitments, Mediterranean decision-makers are still not sufficiently engaged in protecting their marine environment.

A decade ago, Mediterranean countries signed CBD Aichi Target 11 committing to protect at least 10% of their waters with the creation of effective MPAs. Since 2010, most countries have made little or no effort to designate additional areas. A large part of the increased MPA cover is due to France and Spain with a small contribution from Albania, Croatia, Greece and Malta. Egypt, Italy, Slovenia, and Turkey each designated a very small area of new MPAs.

Our analysis shows that most countries are making minimal efforts to establish functioning MPAs. The Mediterranean as a whole is close to meeting its 10% target only because northern Mediterranean countries (e.g. France and Spain) designated large protected areas. However, this percentage is not reflected in well-managed MPAs. For instance, Croatia, Italy, Greece, Slovenia, and Spain designated a considerable percentage of their marine areas for protection, but actual management measures are limited to a few small areas or are inadequate to protect biodiversity. Other countries, like Albania, Algeria, Cyprus, Israel, Morocco, Montenegro, Slovenia and Turkey limit their management efforts to few and/or very small MPAs. Egypt, Lebanon, Libya, Syria, Tunisia, and Monaco have not yet implemented or endorsed official management or monitoring plans in the areas that they claim to protect.



EU countries should ensure that the recently created Natura 2000 network meets the requirements of legally binding EU legislation. These Natura 2000 sites still often lack effective management, monitoring and evaluation. After the EU Commission has approved the Natura 2000 sites proposed by member states, countries have six years to establish conservation measures before being subject to legal action (infringement procedure) by the EU. As a result, they tend to comply with the minimum requirements, primarily to avoid proceedings and not so much to achieve conservation objectives.

These measures can be a good tool for environmental education or awareness raising, but they are not able to reverse biodiversity degradation, recover key fish populations or sustain local economies.

Overall, the current network of MPAs is not ecologically coherent, with a very low rate of representativity and connectivity of habitats. Existing MPAs have been declared almost exclusively in the northern part of the basin. As a result, the current system is not able to provide the key environmental benefits that an ecologically coherent MPA network for the Mediterranean could deliver: spill-over of marine species, connectivity and habitat resilience in a changing global climate. This, in turn, results in a lack of benefits to people, especially the coastal communities who base their economy on fishery or nature-based tourism.

This scorecard highlights some of the key challenges of biodiversity conservation in the Mediterranean. WWF urges all Mediterranean countries and the EU as Contracting Parties to the Barcelona Convention to act boldly and decisively to reverse the loss of marine biodiversity and strengthen the implementation of their National Action Plans towards an effective MPA network in the region.

In order to fill the gaps and reverse the current situation, WWF proposes a number of solutions that derive from both this current analysis and the long-term experience and lessons learned through the work of WWF and many other organizations in the region.

Achieving effective protection of our marine environment is an undeniable challenge and requires a significant mobilization of human and financial resources and, more importantly, a change in the mindset of policy-makers, key stakeholders and local communities.

However, attention to ocean issues is emerging globally and a plethora of opportunities are available to resolve the current deadlock in the Mediterranean. Many successful solutions already exist and could be easily replicated and scaled up. In this region, private and public financial instruments are potentially available, non-governmental and intergovernmental organizations have strengthened capacity and facilitated processes, clear roadmaps have been drafted and agreed, and successful examples of MPAs and national action plans are available.

The Post-2020 Global Biodiversity Framework that countries will commit to next year at the CBD COP15 in China will provide the timely opportunity to put in place the recommended actions and reverse the trend of biodiversity loss in the Mediterranean.

5. WWF RECOMMENDATIONS TO PROTECT OUR SEA

PROTECT KEY UNREPRESENTED BIODIVERSITY AREAS	TRANSFORM PAPER PARKS INTO REAL CONSERVATION TOOLS	ENSURE EQUITY AND INCLUSIVENESS IN MPA MANAGEMENT	INTRODUCE INNOVATIVE SUSTAINABLE FINANCING
<ol style="list-style-type: none"> 1 Implement and improve existing national and international legislation to designate new MPAs in countries that have still not designated MPAs or are protecting very small marine areas. 2 Ensure collaboration between different administrations (e.g. environment, fisheries and coastguard) and ultimately integrate various legal tools. 3 Strengthen the collaboration between neighbouring countries to settle EEZs, create MPAs in the open sea, including transboundary MPAs, to protect unrepresented habitats and highly mobile and migratory species, and enhance the coherence of the MPA network. 	<ol style="list-style-type: none"> 1 For each MPA, define conservation measures and formally adopt and implement long-term and integrated management plans that are based on SMART objectives and include adequate, fully protected areas. 2 Establish effective enforcement mechanisms to ensure the implementation of regulations. 3 Ensure that regular monitoring programmes are set and properly funded to assess MPAs' achievements against the objectives defined in the respective management plans. 	<ol style="list-style-type: none"> 1 Integrate the human dimension into MPA design by considering the socioeconomic implications of MPAs and stakeholders' perceptions of the impact of MPAs. 2 Facilitate stakeholder engagement to address conflict between users, build capacity to contribute to MPA planning and management, ensure compliance with regulations and transparency between sectors. 3 Create local ownership and co-management schemes to share responsibility for the design of MPAs and the management of natural resources among different stakeholders, including small-scale fishers. 	<ol style="list-style-type: none"> 1 Increase current financing to marine conservation and ensure stable financial flows to MPAs. 2 Develop innovative approaches to mobilize alternative financial sources and become less dependent on national budgets. 3 Solve legal or structural barriers, such as shared responsibility for the management of human activities at sea, to make operations more cost-effective and share financing responsibility.



6. CASE STUDIES

TURKEY'S INEFFICIENT CENTRALISED SYSTEM LEAVES MPAs POWERLESS

The management of MPAs in Turkey is compromised by an inefficient governance system. Special Environmental Protected Areas (SEPA), including MPAs, are under the authority of the General Directorate for the Protection of Natural Assets (GDPNA) of the Ministry of the Environment and Urbanization's (MoEU). The system is highly centralized, and does not have on-site management units leaving very limited possibilities for site-level decision-making and local investment.

It wasn't until the end of 2016 that the MoEU established environmental branch directorates in seven provinces (Antalya, Balıkesir, Çanakkale, İzmir, Mersin, İstanbul, Muğla) where most marine MPAs are situated. This provided a governance system closer to marine areas and aimed at improving the management of MPAs. Nevertheless, these directorates – with limited jurisdiction, dependence on the provincial directorate, no budget for patrolling boats and monitoring – do not provide the real solutions that MPAs need to develop solid and successful management plans, with an emphasis on participatory processes.

Setting up robust management units and dedicated budgets for each of the MPAs in Turkey is of the utmost importance. This will enable cooperation and coordination across numerous government administration departments and non-governmental agencies at different levels, address the management needs of each of the sites, and ultimately increase the effectiveness of Turkey's MPA network.



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WITH INNOVATION AND INCLUSIVENESS, GYAROS CONTRASTS MPA SHORTCOMINGS IN GREECE

With its extensive archipelagos, Greece accounts for around 30% of the whole Mediterranean coastline. Responding to pressure from the European Commission, it has designated 20.1% of its marine area under legal protection (EU Birds and Habitats Directives).

But the situation on the ground (or at sea) is not so optimistic. Only three MPAs have a zoning plan in place with legally binding regulations for human activities (i.e. fisheries, maritime traffic and tourism). Ten more Greek National Parks also include marine areas, but they are limited to narrow zones along the coast.

The rest of the Greek MPAs are operating without formally adopted long-term management plans, missing a clear set of conservation goals, objectives and targeted plans of action in the short and long term, making it difficult to assess their effectiveness. The Ministry of the Environment has only recently initiated a comprehensive project to designate specific zoning schemes and conservation measures for all protected areas in order to formally adopt management plans. While this is an important step forward, it remains to be seen whether the management plans will be effective.

Another obstacle is that management bodies are struggling to fulfil their mandate. They are small entities with limited financial resources within a sluggish governance system, where most responsibilities related to the management of MPAs and of maritime and coastal activities are dispersed between agencies at different government levels with quite conflicting directives. Each one is responsible for a number of diverse areas; for example, in the Cyclades the management body oversees 37 sites – marine, terrestrial and freshwater – on 23 islands from only one office.

In 2013, WWF-Greece and partners decided to launch a new approach for the Natura 2000 site of Gyaros, an uninhabited island in the Cyclades that hosts the largest colony of the endangered Mediterranean monk seal (*Monachus monachus*) in Greece.

A key element of the Gyaros initiative has been the active and full involvement of key national and local stakeholders in the process of the MPA design. The Gyaros Consortium of Stakeholders was established together with policy makers, local government, scientists, conservationists and local users, including fishers. Its first task was to develop a common vision for the new MPA. Following open and transparent deliberations, in which all

decisions were unanimously agreed, the Consortium also managed to formulate a comprehensive ecosystem-based management plan. In addition, an innovative surveillance and patrolling system that uses a wide-range marine radar, a high definition infrared camera, and a drone, has been set up and endorsed by the relevant ministers to protect the MPA from illegal activities.

In June 2019 the Greek Ministry of the Environment adopted the proposal for the area's zoning and conservation measures and formally designated the Gyaros MPA. The challenge is now to persuade the government to apply similar participatory approaches and co-management in all Greek MPAs.



A SUCCESS STORY: SPAIN'S LONG-TERM EFFORT IS DELIVERING AN EFFECTIVE NETWORK OF MPAs

Spain has the highest marine biodiversity in Europe. To conserve this ecological wealth, in the 1980s small marine reserves of fishing interest were designated, which included fully protected areas. Later, management plans were established to address other activities, such as diving or recreational fishing. Subsequently, as Spain began to implement the EU Habitats Directive, new marine sites were integrated into the Natura 2000 network. Their management followed the deadlines and more general objectives of the Directive. In 2010 the Spanish network of MPAs was essentially confined to coastal habitats. In order to correct this, extensive research was undertaken to identify new areas. As a result, MPA designation was extended to underrepresented habitats, including the declaration of the Mediterranean Cetacean Migratory Corridor as an MPA.

The effective, innovative, and participatory management of this enormous marine area is Spain's main challenge in terms of marine conservation. To address this, in 2017 the government launched the largest EU-funded project on marine conservation – the INTEMARES project (www.intemares.es). It is an eight-year partnership between the Ministry for Ecological Transition, the Biodiversity Foundation (as project leader), the Spanish Confederation of Fisheries (CEPESCA), the Spanish Institute of Oceanography (IEO), SEO/BirdLife and WWF-Spain. In 2019, the Junta de Andalucía, AZTI Foundation, the University of Alicante and Valencia joined as new partners.

Although the project will not be able to solve all the problems related to the management of MPAs, it focuses on improving governance, and coordination and training of managers and users. This should create stronger policies, improve MPA management planning and help channel public and private funding.

More importantly, the project sets the standards for applying participatory processes and defining the most appropriate management measures for all Spanish MPAs. Results have so far been positive, despite Spain's prevailing culture of low participatory engagement. Diverse stakeholders and interests (including extractive and recreational activities, town councils, river authorities, trade unions, Fisheries Local Action Groups, various ministries, other public and private institutions, and NGOs) have managed to work together in all regions of Spain to contribute to a common vision of MPA governance and management.

Through multiple workshops throughout Spain, the authorities have taken proposals for management plans and sectoral regulations into the field giving all local stakeholders the chance to participate. New online communication channels allow everyone to consult and comment on the actions and working documents related to MPA management.

The project will continue to promote awareness and participation in all sectors of the management of the MPA network, and to share the benefits of the new socioeconomic opportunities that MPAs can generate.



NOT PAPER PARKS... BUT PARKS WITHOUT PAPER IN TUNISIA

Throughout the Mediterranean there are so-called paper parks: designated MPAs that are not properly managed. Meanwhile, in Tunisia, there are parks without paper: successful, locally co-managed areas that are still waiting for the necessary long-term legal recognition.

The creation of marine and coastal protected areas in Tunisia has been a national priority since 2000, when the Ministry of the Environment and Territorial Development commissioned the Agency for Coastal Protection and Management (APAL) to create MPAs. After identifying priority areas for conservation, APAL developed baseline studies, completed several management plans, and drafted a national strategy for the creation of MPAs. This strategy, which includes 12 sites, was adopted during the first meeting of the National Council of Marine and Protected Areas in 2017. At the same meeting, the council launched the process for creating four protected areas: the archipelago of Galite, the archipelago of Zembra, the Kuriat Islands and the Kneiss Islands. However, the process is still ongoing and, since the application decree is still lacking, no MPAs have yet been legally declared in Tunisia.

Despite this, at a few sites, APAL has engaged NGOs as management partners, creating the first co-management models. For example, the Kuriat Islands and Zembra archipelago have dedicated local management teams that have established formal co-management committees between administration and local NGOs. Special attention has been paid to the Kuriat Islands, as they are home to many remarkable species such as the loggerhead turtle (*Caretta caretta*), fan mussel (*Pinna nobilis*) and the endemic seagrass *Posidonia oceanica*. The islands are a focus for national and international research institutions, and a training centre for students of the Tunis National Institute of Agronomy (INAT) and other institutions.

Tabarka is not part of the priority MPAs and APAL has not yet set up any local management team. However, a regulation zone for diving has been designed within the border of the future MPA. This is appreciated by local fishers and has helped develop a good understanding between the administration and the users of the future MPA. With the support of NGOs, fisheries administrations, and APAL a participatory planning process has been launched to support small-scale fishers in the conservation of their fisheries resources.

While the existence of management plans, the implementation of mitigation measures and funding opportunities represent good practices for Tunisia, the government should speed up the process of creating MPAs to ensure legally binding rules and long-term protection and management of marine biodiversity.



LIST OF ABBREVIATIONS

CBD	Convention on Biological Diversity
CDDA	Common Database on Designated Areas
COP	Conference of the Parties
EBSA	Ecologically and Biologically Significant Area
EEZ	Exclusive Economic Zone
FRA	Fishery Restricted Area
GFCM	General Fisheries Commission for the Mediterranean
ICZM	Integrated coastal zone management
IUCN	International Union for Conservation of Nature
MAPAMED	MARine Protected Areas in the MEDiterranean
MedPAN	Network of MPA managers in the Mediterranean
MMI	WWF Mediterranean Marine Initiative
MPA	Marine Protected Area
nm	Nautical mile
OECMs	Other Effective area-based Conservation Measures
PISCO	Partnership for Interdisciplinary Studies of Coastal Oceans
PSSA	Particularly Sensitive Sea Area
SDGs	Sustainable Development Goals
SEPA	Special Environmental Protection Area
SPA/BD	Specially Protected Areas and Biological Diversity Protocol
SPAMI	Specially Protected Areas of Mediterranean Importance
UNESCO	United Nations Educational, Scientific and Cultural Organization

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USD 5.6 TN

is the economic value of Mediterranean natural assets

28%

of Mediterranean species are endemic



34%

of Mediterranean *Posidonia* has disappeared

1.27%

of the Mediterranean is covered by MPAs with implemented management plans



Why we are here

To stop the degradation of the planet's natural environment and to build a future in which humans live in harmony with nature.

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