COASTS AND MARINE ENVIRONMENT



The Spanish shoreline is slightly over 10,000 km length. This narrow strip of the country's environment is of great geomorphological diversity, as well as being highly environmentally sensitive and fragile. It also supports a large number of socioeconomic interests. Planning and organisation of these interests is required, which at the same time allows for protection and conservation.

Law 2/2013, of 29 May, on the Protection and Sustainable Use of the Coastline, amending Law 22/1998, of 28 July, the Coastal Law, is an effective legal instrument for coastal protection and preservation. This law provides a stable, predictable and secure framework for all parties involved: users, owners, companies, public authorities, etc., such that the environmental protection of the coast is completely compatible with the economic development of coastal areas.

Marine strategies

Law 41/2010, of 29 December, on the Protection of the Marine Environment, transposes the Marine Strategy Framework Directive (2008/56/CE), with the objective of extending environmental protection to Spanish waters.

The aim of this law is to achieve good environmental status in the marine environment, with a time limit set for 2020, by means of planning tools



known as marine strategies. Five strategies will be developed, one for each marine demarcation established in the law

The law on the Protection of the Marine Environment also includes provisions for the protection of marine biodiversity, for example those relating to the formal creation of the Spanish Network for Protected Marine Areas. The network will be made up of distinct types of areas, among them the Natura 2000 Network areas and, provided integration criteria are complied with, the Marine Reserves of interest to the fishing industry.

Marine biodiversity protection

In recent years, clear progress has been made towards the goal of having greater knowledge of the wealth of our seas, and of providing an adequate protection regime for those representative areas, and those species, that are most vulnerable to human activity.

Some of the current areas of work at a national level relate to the declaration of marine protected areas and to the launch of the Spanish Inventory of Marine Habitats and Species. Both areas of work are based on the provisions of Law 41/2010, of 29 December, on the Protection of the Marine Environment and Law 42/2007, of 13 December, on Natural Heritage and Biodiversity.

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- The first phase of the elaboration of the Marine Strategies was finalised in 2012: initial assessment of the status of the marine environment, definition of good environmental status and establishment of environmental goals.
- The Spanish Inventory of Marine Habitats and Species is a consultation tool for knowledge, planning and management of the natural heritage of the marine environment.
- The objective of the Network of Marine Protected Areas is to have a coherent, well managed network of protected marine areas that represent the main marine ecosystems of Spanish waters.
- A total of 95.85% of Spain's coastline is demarcated.
- In 2012, under the criteria of the new legislation on bathing waters, there was an increase of 2.3% in the percentage of sample points obtaining an excellent grade.

INDICATORS

- Marine strategies
- Spanish Inventory of Marine Habitats and Species
- Spanish Network of Marine Protected Areas
- Demarcated coastline
- Quality of the coastal bathing waters

With the aim of assessing the conservation status and enhancing knowledge of marine heritage, according to RD 556/2011, of 20 April, on the development of a Spanish Inventory of Natural Heritage and Biodiversity, a standard reference list of the types of marine habitats in Spain has been drawn up, along with their hierarchical classification, relating them to the different existing classifications (Annex I of Law 42/2007, Directives and International Treaties). To this end, the reference list is expected to be officially adopted by means of a Ministerial Decree in 2013. Additionally, a digital version has been developed in order to disseminate the information in the inventory.

Marine Protected areas

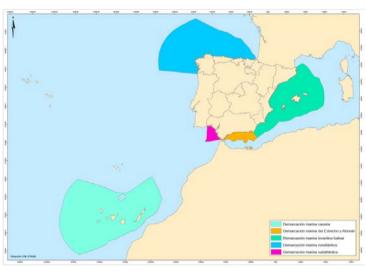
The first steps have been taken to establish the Spanish Network of Marine Protected Areas, a coherent, well managed network of Marine Protected Areas in Spanish waters. In compliance with the criteria established in Royal Decree 1599/2011, of 4 November, establishing the integration criteria for marine areas into the Spanish Network of Marine Protected Areas, the first areas will be included in the network in 2013.



Marine strategies

The essential planning instrument to meet the objective of obtaining and/or maintaining a good environmental status in the marine environment

Spanish marine demarcations



Source: MAGRAMA

Marine strategy: stages of drafting



MAGRAMA is the competent authority for the application of the Marine Strategy Framework Directive that has been transposed into Spanish legislation by Law 41/2010, on the Protection of the Marine Environment. This law sets out the legal status required to achieve or maintain good environmental status of the marine environment and regulates the essential planning instruments to be used to meet the objective: the marine strategies. A marine strategy will be developed for each of the five marine demarcations (North Atlantic, South Atlantic, Canaries, Levantine-Balearic, and Gibraltar Strait and Alboran Sea), covering the entire marine environment under their sovereignty or jurisdiction, being more than 1 million km².

The marine strategies are action plans with the following components: initial evaluation, definition of good environmental status, environmental objectives, monitoring programmes and measurement programmes. During 2012 the first phase of the strategies was developed: initial evaluation, good environmental status and environmental objectives.

The definitive documents are available on the internet, along with the document on environmental objectives, which was approved by agreement of the Ministers Council on the 2 November 2012.

Law 41/2010 on the Protection of the Marine Environment provides for coordination between administrations, through the Interministerial Commission for Marine Strategies (created by RD 715/2012) and the Marine Strategies Monitoring Committees (one for each marine demarcation).

After the initial work as described, the next step in the strategies is the design of the marine environment monitoring programmes that will be operative as of July 2014. These monitoring programmes must:

- Take full advantage of the monitoring programmes that already exist by virtue of other European or international obligations.
- Analyse the indicators established for the monitoring of environmental objectives.
- Take into account all the indicators of good environmental status included in the directive.

Example of an INDICATOR: litter on the continental shelf

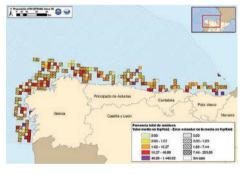
The marine strategies must assess the marine environment status by means of 11 indicators of good environmental status. One of these indicators, D10, deals with marine litter; the accumulation of marine litter must be analysed, according to the directive, on the

coastline, on the seabed and in the water column. Likewise, the impacts of litter on marine life must also be taken into account.

To address the indicator of seabed litter, data from oceanographic bottom-trawling operations, which are regularly carried out by the Spanish Institute of Oceanographic in the distinct Spanish seas, was analysed.

This analysis has provided, for the first time, an important perspective on the densities of marine litter accumulated on the seabed; this accumulation has been analysed both as a whole (total density, see next chart) and systematically by different types of litter (plastics, different materials, fish litter...).

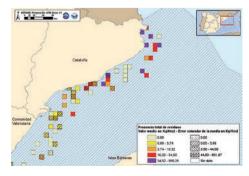
Total density (kg/Km²) of marine litter on platform seabed In the different marine demarcations (no information for Canary Islands)

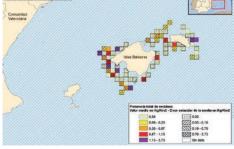


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M.D. North Atlantic

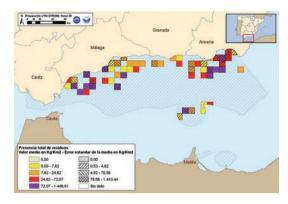
M.D. South Atlantic





M.D. Levantine-Balearic (1)

M.D. Levantine-Balearic (2)



M.D. Strait of Gibraltar and Alboran

NOTES

- This indicator is only an example of several indicators that must be analysed through the marine strategies for the evaluation and monitoring of the marine environment status.
- The marine strategies are living documents, as all their content must be updated at least every six years.

SOURCES

• Information provided by the Directorate-General for Coastal and Marine Sustainability. MAGRAMA. 2013

FURTHER INFORMATION

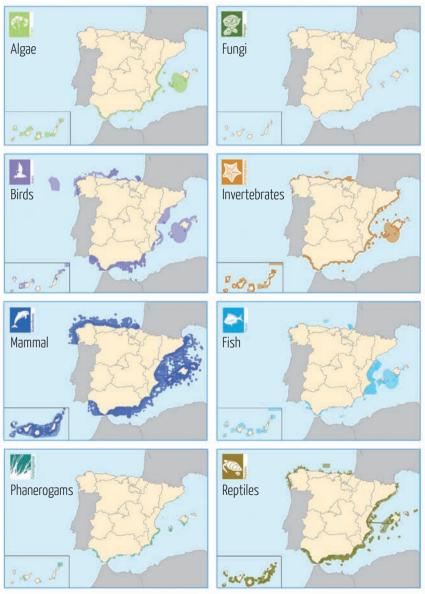
- http://www.magrama.gob.es/es/costas/temas/estrategias-marinas/default.aspx
- http://www.magrama.gob.es/es/costas/temas/default.aspx



Spanish Inventory of Marine Habitats and Species

The Spanish Inventory of Marine Habitats and Species is a consultation tool for knowledge, planning and management of natural marine heritage

Spanish Inventory of Marine Species. Presence in spanish waters, by species group



Source: Directorate-General for Coastal and Marine Sustainability. MAGRAMA. 2013

The geographical distribution of the species does not show their total distribution, but that registered in the Spanish Inventory of Marine Species at December 2012; likewise, the variety of sources does not allow, in every case, for precise coordinates, with the distributions of species being established according to the scope of the study or project.

Inventory of Marine Habitats and Species: Identified taxa. 2012

	Number of identified taxa (*)									
Regions and marine demarcations	Algae (*)	Birds (*)	Phanerogams (*)	Fungi (*)	Invertebrates (*)	Mammal (*)	Fish (*)	Reptiles (*)		
Atlantic Northeast region	887 (86)	45 (43)	98 (7)	0 (0)	1,546 (116)	80 (63)	641 (101)	12 (10)		
North Atlantic MD	391 (40)	45 (43)	96 (7)	0 (0)	1,006 (79)	77 (63)	399 (88)	11 (10)		
South Atlantic MD	286 (37)	43 (42)	97 (6)	0 (0)	429 (84)	71 (63)	460 (84)	11 (10)		
Canary Islands MD	481 (42)	43 (42)	95 (6)	0 (0)	631 (102)	78 (63)	303 (75)	11 (10)		
Mediterranean region	369 (31)	36 (36)	6 (4)	4 (0)	514 (45)	35 (28)	312 (38)	4 (4)		
Gibraltar Strait and Alboran Sea MD	446 (64)	44 (43)	99 (6)	4 (0)	1,995 (124)	72 (63)	482 (92)	11 (10)		
Levantine-Balearic MD	728 (65)	43 (42)	97 (6)	0 (0)	1,903 (120)	72 (63)	599 (93)	11 (10)		

(*) Species with some level of protection. Source: MAGRAMA

Among the most remarkable aspects of the Inventory of Marine Habitats and Species, which deserves mention, is the elaboration of the standard reference list of the types of marine habitats existing in Spain. This is a state reference list that includes the hierarchical classification of the 886 marine habitats identified in Spain. It was approved by a Resolution of the Directorate-General for Coastal and Marine Sustainability on 22 March 2013.

The list mentioned makes available not just an extensive catalogue of the marine habitats found within Spain, but provides an inventory with information and a descriptive cartography that enables the understanding of the importance and significance of the marine habitats mentioned and, in the future, the monitoring of their conservation status.

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The use of this classification system will allow, thanks to the convergence between the reference list and other classifications, for easily comparable cartographic information for the habitats included, for example, in Law 42/2007, of 13 December, on Natural Heritage and Biodiversity (transposition of the Habitats Directive into Spanish legislation), OSPAR Convention, Barcelona Convention, EUNIS Classification System (European Nature Information System) and Law 5/2007, on the National Parks Network, among others.

NOTES

- The Inventory of Marine Habitats and Species is a product of Law 42/2007, of 13 December, on Natural Heritage and Biodiversity, which includes in its Title I, Chapter I, the obligation to draw up the Spanish Inventory on Natural Heritage and Biodiversity, and RD 556/2011, of 20 April, for the development of the Inventory of Marine Habitats and Species, that defines the minimum content to take into account for each component. The result of both inventories will be digitally published in 2013, consisting of interpretative guidance of the marine habitats of Spain, and of descriptive fact sheets on habitats and marine species included in the Inventory of Marine Habitats and Species.
- The reference list of marine habitats existing in Spain and the links are available in the section 'Coasts and Marine environment' of the Ministry of Agriculture, Food and Environment web.
- The number of identified taxa for birds refers to those considered as strictly marine by SEO/Birdlife.

SOURCES

• Information provided by the Directorate-General for Coastal and Marine Sustainability. MAGRAMA. 2013

FURTHER INFORMATION

http://www.magrama.gob.es/es/costas/temas/biodiversidad-marina/



Spanish Network of Marine Protected Areas

The Spanish Network of Marine Protected Areas will provide a coherent and well managed net of protected marine areas in Spanish waters to ensure the protection, conservation and recovery of natural heritage and Spanish marine biodiversity

Protected Marine Areas Network in Spain

Source: Directorate-General for Coastal and Marine Sustainability. MAGRAMA. 2013

Protected Marine Area

The Spanish Network of Marine Protected Areas was established by Law 42/2007 on Natural Heritage and Biodiversity, and was further developed subsequently by Law 41/2010, on the Protection of the Marine Environment. This included the need for a Master Plan, criteria for the inclusion of areas in the network and minimum management criteria.

So far RD 1599/2011, which establishes the inclusion criteria for areas in the network, has been approved.

As a first step in the development and extension of the network, those marine spaces already declared as Special Areas of Conservation (SAC) within the Natura 2000 Network are to

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be included in the Marine Protected Area Network (MPAN), taking into account the integration criteria of the MPAN marine protected areas established in RD 1599/2011.

The areas that fall within this are the 24 marine SAC of the Canary Islands, declared by means of Order ARM/2417/2011, and 'El Cachucho', declared as a Marine Protected Area and as a SAC in RD 1629/2011. Spain is also working to include within the network Marine Reserves in external waters of interest to the fishing industry established under the auspices of the Law on Maritime Fishing.

Law 41/2010 establishes the need to draw up a Master Plan for the Network of Marine Protected Areas as a basic coordinating instrument for the achievement of the network objectives, and includes guidelines for management and the conservation of the areas it covers, a programme of common actions and projects of interest that can be subject to state financing. It also includes common minimum criteria for the coordinated, coherent management of the network.

The development of the Master Plan was, in April 2013, in an initial phase, with it being necessary for it to be reviewed and updated as more areas are included in the network over the following months. The Master Plan will be brought into legislation as a Royal Decree and, in accordance with Environmental Impact Assessment legislation and the Law on the Protection of the Marine Environment, it will have to be submitted to Strategic Environmental Assessment for its adoption. At the same time, a public participation process will be used for its preparation and review.

MUTES

- The Spanish Network of Marine Protected Areas was established by the Law 42/2007 on Natural Heritage
 and Biodiversity, and was further developed by Law 41/2010, on the Protection of the Marine Environment,
 setting up the network and providing the requirement to have a master plan, a criteria for the inclusion of
 areas in the network and minimum management criteria.
- The Network of Marine Protected Areas will be a coherent and well managed network of protected marine areas in Spanish waters, with the aim of assuring the protection, conservation and recovery of natural heritage and biodiversity.
- The Network of Marine Protected Areas will be made up of protected areas located in the Spanish marine environment, which are representative of marine natural heritage, independent of whether their declaration and management are regulated by international, European or state legislation. Likewise, those spaces whose declaration and management are regulated by autonomic legislation, can also be part of the network in accordance with article 36.1 of Law 42/2007, of 13 December, on Natural Heritage and Biodiversity.

SOURCES

• Information provided by the Directorate-General for Coastal and Marine Sustainability. MAGRAMA. 2013

FURTHER INFORMATION

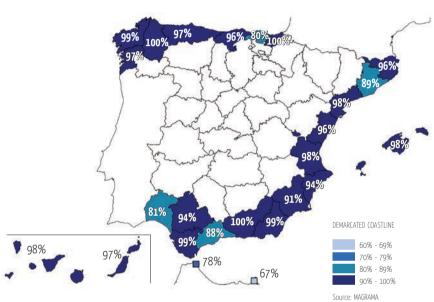
http://www.magrama.gob.es/es/costas/temas/biodiversidad-marina/



Demarcated coastline

In total 95.85% Spanish coast is now demarcated





In 2012, the Spanish coastal area was demarcated by 95.85%. Demarcation is the administrative procedure used to mark the boundaries of the publicly owned shoreline. A new Law, 2/2013, of 29 May, on the Protection and Sustainable Use of the Coastline, which amends Law 22/1988, of 28 July, the Coastal Law, is an effective legal instrument for the protection and conservation of the coast, providing a stable, predictable and secure framework for all the parties involved: users, owners, companies, public authorities, etc. This is intended to correct those problems that had been detected, as well as to promote economic activity and job creation on the coast; to increase legal certainty for developments on the Spanish coast and to improve the environmental protection on the coast through, among other measures, the simplification and reduction of administrative burdens caused by administrative procedures.

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The new law has, among its aims, the strengthening of the legal certainty of the demarcation procedure. For this reason, as a first step it revises the actual concept of the public shoreline, and secondly, it includes greater guarantees for citizens, both during the demarcation procedure and once it is completed.

Additionally, the law clarifies the boundaries of the publicly owned shoreline and the protection easement area without modifying the established regime of forbidden uses, which guarantee the conservation of the Spanish coast. Furthermore, it balances and ensures compatibility between environmental, economic and social uses, and is therefore a tool that guarantees the environmental sustainability of the coast.

Private land adjacent to the publicly owned shoreline will continue to be subject to the ownership limitations established through the boundaries of the easement areas and the areas of influence from the inner boundary of the shoreline.

NOTES

- The Ministry of Agriculture, Food and Environment carries out the demarcation plan, processing and approving the records that define the boundary of the publicly owned shoreline.
- To raise awareness of the process, the Directorate-General for Coastal and Marine Sustainability has launched a project that allows the public to consult, through cartography of the Spanish shoreline and available aerial photographs, the boundary line of the publicly owned shoreline and the private land affected by the protection easement area. This information can be accessed in three ways: through the MARM map viewer (http://sig.marm.es/dpmt/), through the Cadastre Web site of the Ministry of Economic and Finance (http://www.sedecatastro.gob.es/) or by accessing the WMS Service of the publicly owned shoreline. With the modification to the Coastal Law this information will be published in its entirety on the MAGRAMA web site.

SOURCES

• Information provided by the Directorate-General for Coastal and Marine Sustainability. MAGRAMA. 2013

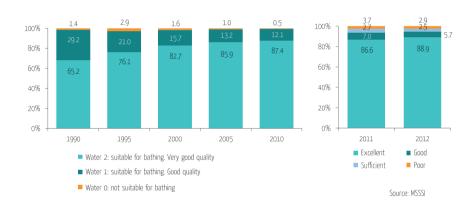
FURTHER INFORMATION

http://www.magrama.gob.es/es/costas/temas/gestion-del-dominio-publico-maritimo-terrestre/

Quality of coastal bathing waters

During 2012 there was an increase in the percentage of sample points classed as excellent, according to the criteria of the new legislation on bathing waters

Quality of coastal bathing waters. Percentage of sampling points by category



The 2012 season, as indicated in the report 'Quality of bathing waters in Spain', was the second in which the criteria of the new legislation on bathing waters have been applied. Results were obtained from 1,923 out of the 1,926 existing sample points for coastal waters, with 1,916 able to be classified, as set out in the following table.

Quality of coastal bathing waters

Autonomous Communities	Excellent	Good	Sufficient	Poor	Total
Total	1,703	110	56	47	1,916

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In percentage terms, 88.9% of the sample points of coastal bathing waters were classed as excellent, 5.7% as good, 2.5% as sufficient and 2.9% as poor. With respect to 2011, there has been an increase in the percentage of sample points classed as excellent, and the percentage of sample points classed as sufficient has decreased from 3.7% to 2.9%.

In terms of the autonomous communities, seven out of the 12 assessed had more than 90% of the sample points classed as excellent. The best percentages were seen in Ceuta, with 100% of sampled points classed as excellent, followed by Catalonia (98%) and the Canary Islands (97%).

At EU level, according to the EEA report on European Bathing Water Quality 2012, Spain's values were above the EU average, with 84% of its maritime waters qualified as excellent while the average was 80.1%.

NOTES

- Directive 2006/7/CE regulates, within the EU, the management of the quality of bathing waters. In Spain, this area is regulated by means of the transposition of the directive into Spanish legislation through RD 1341/2007.
- The Directive and the Royal Decree classify the quality of bathing waters as: poor quality waters, sufficient quality waters, good quality waters and excellent quality waters.
- The data for Spain on the quality of the coastal bathing waters in 2011 contained in the reports of the Ministry of Health, Social Services and Equality and the EEA, do not coincide due to the fact that the Spanish authorities do not use the same statistical approach for the analysis of the water quality as the EEA.

SOURCES

- Ministry of Health, Social Services and Equality. Technical report 'Quality of the bathing waters in Spain'.
 2012.
- European Environment Agency (EEA). 'European bathing water quality in 2011' report.

FURTHER INFORMATION

- http://nayade.msc.es/Splayas/home.html
- http://ec.europa.eu/environment/water/water-bathing