

COASTS AND MARINE ENVIRONMENT

2.5



Spain's publicly owned shoreline is slightly more than 10,000 km long and is a narrow strip of the country's environment that, apart from being highly environmentally sensitive and fragile, also has a large number of socioeconomic interests. This means steps must be taken to conserve and protect it that are coherent with growth in economic activities and the defence of the social interests of both, present and future generations.

The legal framework in force consists of the Shores Law 22/1988 and its Regulations, which prioritise the protection and conservation of the integrity of the publicly owned shoreline and coastal and marine systems, guaranteeing access and public use of the coast by the entire community and recovering the shoreline from built-up and deteriorated stretches. All this is to be achieved both through physical actions on-site involving various types of work and also by processing procedures and adopting administrative decisions, also of various kinds and including accurately marking the boundaries of publicly owned shoreline (a procedure better known as demarcation), which aim to contribute to the physical integrity of publicly owned shoreline and free public use of it.



Marine Strategies

In addition to the legislation affecting coasts and in order to extend a similar level of protection to our seas, Law 41/2010 of 29 December, 1987 on the protection of the marine environment sets out the legal framework governing the adoption of the measures necessary to achieve or maintain good environmental status for the marine environment by transposing the Framework Directive on Marine Strategy (2008/56/EC) into Spanish legislation.

The objective of this law is to achieve good environmental status for the marine environment by planning properly, giving the marine strategies the role of essential tools to carry out that planning process. A strategy is being drawn up for each of the established marine demarcations.

KEY MESSAGES

A consultation tool will be made available through the IEHEM for knowledge, planning and management of natural heritage in the interest of conserving and protecting Spain's marine environment.

Demarcated coastline continued to grow in 2011 to 95.84% of the total.

Classifying the type of coastal area shows the differences in coastline in each of the geographical areas and Spanish provinces.

Coastal bathing water quality remained in good shape yet another year.

INDICATORS

- Spanish Inventory of Marine Habitats and Species (IEHEM)
- Demarcated coastline
- Geomorphological classification of coastal areas
- Quality of coastal bathing waters

Each of these 5 marine strategies requires an initial assessment of the state of the marine environment and of its environmental status. They also require establishment of a series of environmental goals (which will include a set of indicators to monitor attainment of these goals) and programmes to monitor and measure attainment of good environmental status.

Law 41/2010, in addition to regulating the content and the process of drawing up the marine strategies, includes other provisions for the protection of marine biodiversity, including those relating to the formal creation of the Network of Marine Protected Areas in Spain, setting out its targets, the areas it covers and the mechanisms via which these should be designated and managed. The Network will consist of different types of areas, including Natura 2000 sites and, providing the criteria for eligibility are fulfilled, the Marine Reserves of interest to fishing.

Protection of Marine Biodiversity

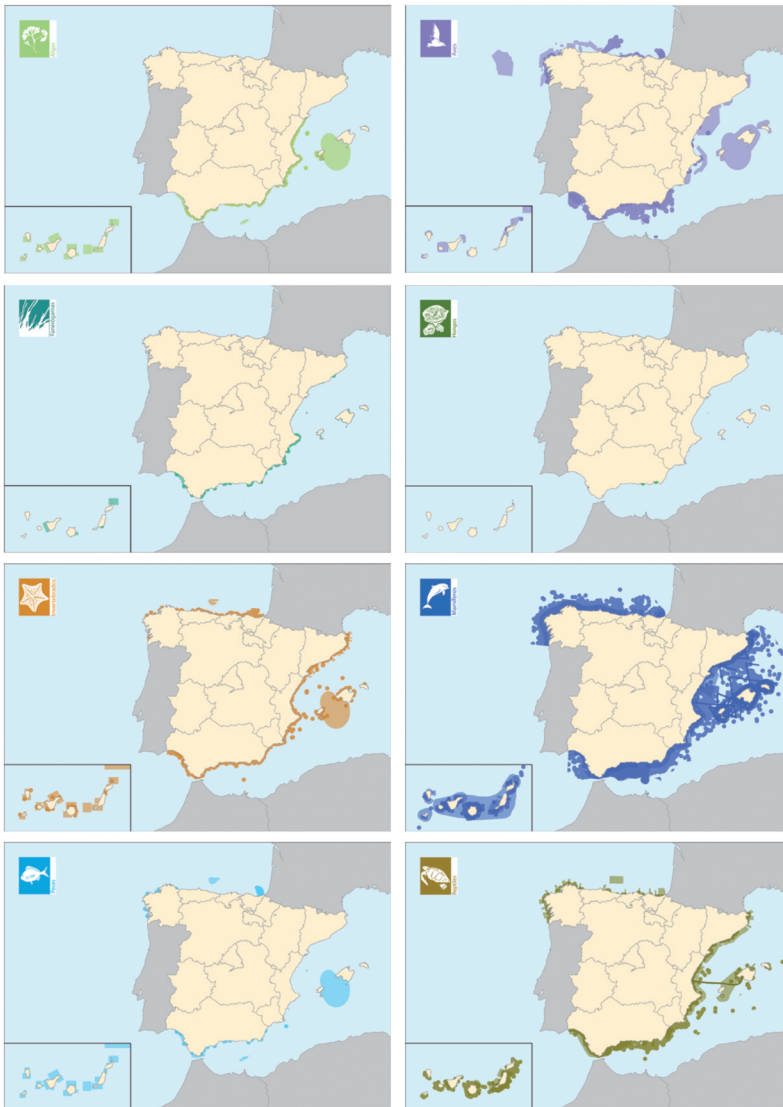
Moreover, Law 42/2007 of 13 December, on natural heritage and biodiversity, which is the transposition into Spanish law of the Habitats Directive, is the basic framework for the protection of biodiversity in Spain. For this reason, it also regulates aspects related to marine biodiversity. The Law includes preparing the Spanish Inventory of Natural Heritage and Biodiversity, which in turn includes the Spanish Inventory of Marine Habitats and Species (IEHEM), a key instrument for assessing the state of conservation and expanding the knowledge of Spain's marine heritage.

Royal Decree 556/2011, of 20 April for the development of the Spanish Inventory of Natural Heritage and Biodiversity provides for the creation of a list of the types of marine habitat in Spain and their ranking, by relating them to the various existing classifications (annex I of Law 42/2007 of 13 December, Directives and international conventions). To that effect, the National Reference List of marine habitats is expected to be officially adopted by means of a Ministerial Decree in 2012. In a second stage, a list of plant and wildlife in Spanish waters will be drawn up by taxonomical group and will include the state of conservation in accordance with the Red Lists.

Spanish Inventory of Marine Habitats and Species (IEHEM)

The IEHEM is a consultation tool for knowledge, planning and management of natural marine heritage and contributes to the fulfilment of obligations and commitments made at national and international level

SPANISH INVENTORY OF MARINE SPECIES
PRESENCE IN SPANISH WATERS, BY GROUP OF SPECIES



Source: Directorate-General of Coast and Marine Sustainability MAGRAMA. Entries processed as at 23/0.4/2012.

2.5 COASTS AND MARINE ENVIRONMENT

The information represented in the maps shows the presence of groups of species in Spanish waters according to the data collected up to 2011 as part of the Spanish Inventory of Marine Habitats and Species (IEHEM). Because of the variety of sources that contribute information to the Inventory, these maps only reflect highly accurate cartographic information for specific areas bounded by polygons and for municipal records that provide information on turtles, birds and/or cetaceans with a reference to the nearest municipality where they have been caught/stranded/sighted.

IEHEM. TAXA IDENTIFIED

MARINE REGIONS AND SUBREGIONS	MARINE DEMARCATIONS	No. OF TAXA IDENTIFIED							
		ALGAE (*)	BIRDS (*)	PHANEROGAMS (*)	FUNGI (*)	INVERTEBRATES (*)	MAMMALS (*)	FISH (*)	REPTILES (*)
Northeast Atlantic Region		262 (28)	35 (35)	8 (7)	0 (0)	1033 (58)	51 (35)	424 (62)	7 (6)
Bay of Biscay and Iberian Coast Subregion	North Atlantic Marine Demarcation	189 (14)	28 (28)	3 (3)	0 (0)	534 (12)	39 (27)	18 (4)	5 (5)
	South Atlantic Marine Demarcation	16 (2)	13 (13)	4 (4)	0 (0)	298 (35)	25 (21)	338 (57)	6 (5)
Atlantic Macaronesian Canary Islands Subregion	Canary Islands Marine Demarcation	84 (16)	16 (16)	6 (5)	0 (0)	357 (36)	37 (30)	195 (26)	7 (6)
Mediterranean Sea Region		369 (31)	36 (36)	6 (4)	4 (0)	514 (45)	35 (28)	312 (38)	4 (4)
	Strait of Gibraltar and Alboran Sea Marine Demarcation	221 (11)	26 (26)	5 (4)	4 (0)	312 (41)	29 (24)	182 (14)	3 (3)
	Levantine-Balearic Marine Demarcation	258 (29)	33 (33)	5 (4)	0 (0)	385 (31)	26 (23)	259 (36)	4 (4)

(*) Species with some degree of protection

Source: Directorate-General of Coast and Marine Sustainability -MAGRAMA.

One of the most important aspects of the Spanish Inventory of Marine Habitats and Species is the preparation of a National Reference List (NRL), which will present a ranking of the marine habitats in Spain as part of the marine areas and subareas determined by Law 41/2010, of 29 December, on environmental protection.

All the habitats in the NRL will include geospatial information and their equivalents in the EUNIS classification system.

NOTES

- Item 1 of Chapter 1 of Law 42/2007 of 13 December, on Natural Heritage and Biodiversity included the obligation to draw up the Spanish Inventory of Natural Heritage and Biodiversity, R.D. 556/2011, of 20 April, for the development of the Spanish Inventory of Natural Heritage and Biodiversity defines the minimum content that the Spanish Inventory of Marine Habitats and Species (IHEM) will cover.
- Marine species and habitats to be included in the inventory will, as a matter of priority, be those referred to in:
 - The various Annexes to Law 42/2007
 - Law 5/2007, on the Network of National Parks
 - Protocol concerning Special Protection Areas and Biological Diversity in the Mediterranean (Barcelona Convention)
 - OSPAR convention for the protection of the Marine Environment of the North-east Atlantic
- The National Reference List of marine habitats, which is due to be officially adopted by Ministerial Decree in 2012.

SOURCES

- Directorate-General of Coast and Marine Sustainability -MAGRAMA

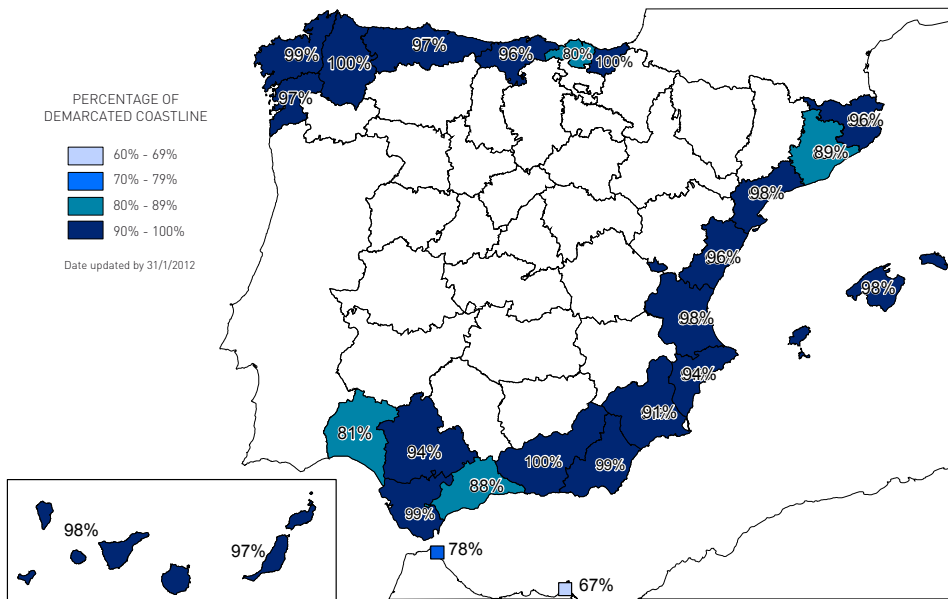
FURTHER INFORMATION

- <http://www.magrama.gob.es>

Demarcated coastline

95.84% of Spain's coastline is now demarcated

PERCENTAGE OF DEMARCATED COASTLINE BY PROVINCE



In 2011, 95.84% of Spain's coastline was demarcated. Although only 4,659 kilometres were demarcated between 1988 and 2003, the rate subsequently increased since 2004 and now exceeds 9,800 km of coastline.

Under Spain's Shores Law 22/1988 of 28 July, demarcation is the administrative procedure used to mark the boundary of publicly owned shoreline. This mechanism is applied via a procedure that requires rigorous technical assessments, declarations by private individuals (who are personally notified) and reports by other authorities.

Demarcation is essential to achieving the goals set out in the Shores Law, namely guaranteeing public access and use, regulating rational use of its assets and ensuring appropriate coastal water and shoreline quality.

This law establishes the boundaries of the publicly owned shoreline and stipulates that adjacent privately owned land should be subject to regulations that impose certain minimal restrictions on ownership that complement the regulations implemented by regional government. These restricted coastal strips are classified as:

- a) *Transit easement* (a 6-metre strip, extendable to 20 metres), which should remain permanently open to pedestrian transit
- b) *Protection easement*: (a strip 20–100 metres wide, extendable to 200 m). Various uses are forbidden in this strip, particularly residence and occupancy, which is designated for use by public services and facilities;
- c) *Sea access easement*: which covers land adjacent to or contiguous with the publicly owned shoreline and is of the length and width required to ensure public access to and use of the sea.

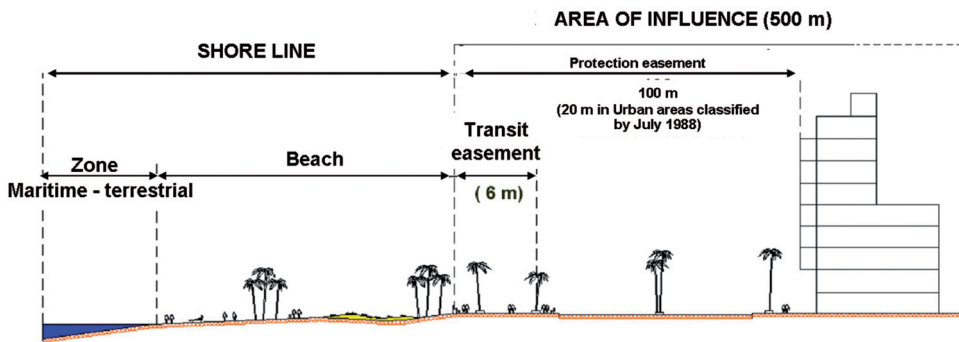


Diagram of shoreline, shore, transit and protection easements and area of influence, specified by Spain's Shores Law 22/1988.

The Law also defines an area of influence that extends a minimum of 500 metres inland from the shoreline, within which minimum development is permitted so as to ensure respect for the environment and protection of the coastline.

Therefore, creation of demarcation boundaries, in other words, physically separating the shoreline from surrounding privately owned land, is fundamental to application of legislation to protect the coastline.

NOTES

- The Ministry of Agriculture, Food and Environment is currently carrying out demarcation and is processing and approving the records that define the boundary of the publicly owned shoreline.
- To raise awareness about this task, the Directorate-General for Coastal and Marine Sustainability has launched a project that will produce maps and aerial photographs of coastal areas showing the boundaries of the publicly owned shoreline and the privately owned land affected by protection easement. This information can be accessed in three ways: via the MARM's on-line viewer (<http://sig.marm.es/dpmt/>), via the on-line Land Register managed by the Ministry of Economy and Finance (www.sedecatastro.gob.es) or via access to the WMS Service of DPMT.

SOURCES

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

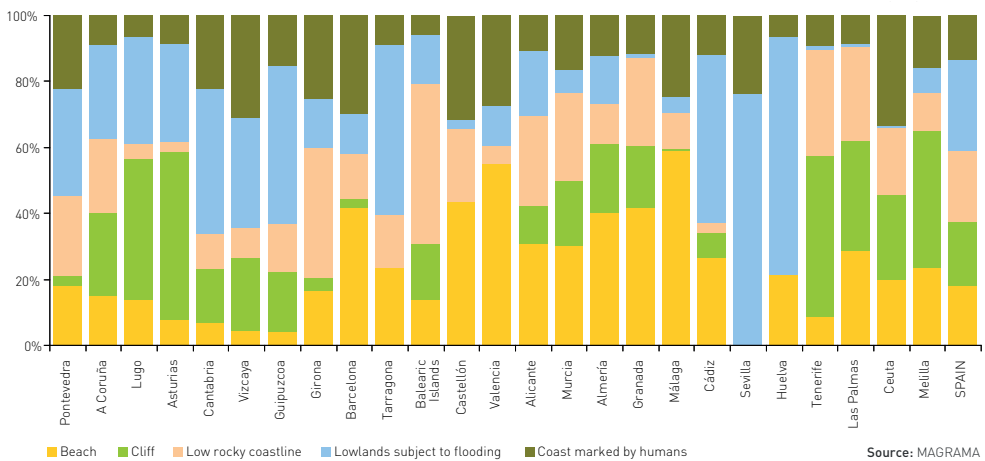
FURTHER INFORMATION

- <http://www.magrama.gob.es/es/costas/temas/default.aspx>

Geomorphological classification of Coastal Areas

Cliffs and lowlands subject to flooding, mainly inlets, are predominant in the north, while there is a greater percentage of beaches in the Mediterranean

GEOMORPHOLOGICAL CLASSIFICATION OF COASTLINE BY PROVINCE (%)



A classification of Spain's coastal areas has been concluded recently by identifying the type of coast thanks to the photographic interpretation of PNOA flights, conducted between 2002 and 2007 and with the support of the oblique-wing flights of the Directorate-General of Coast and Marine Sustainability.

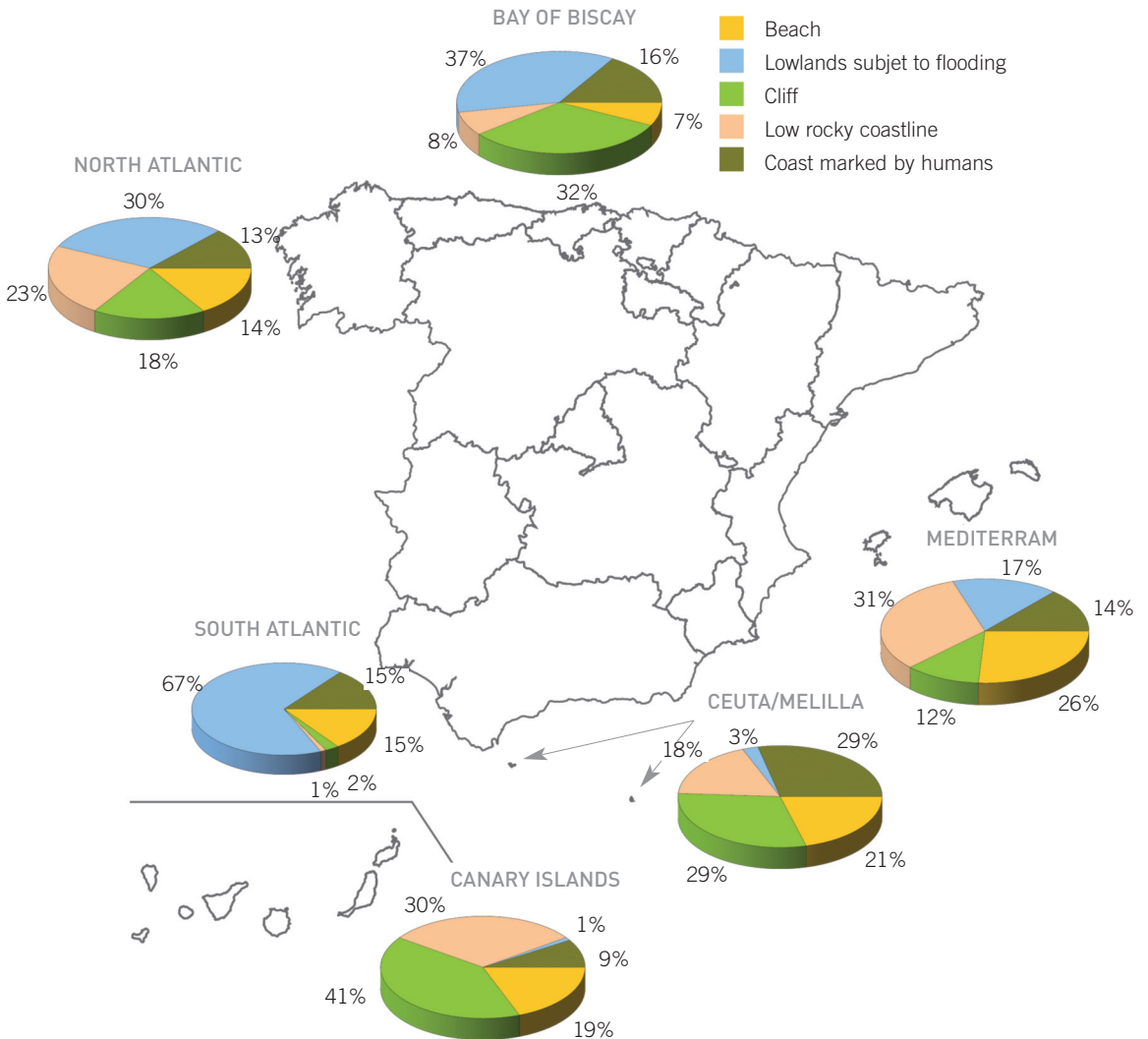
The five major groups in the geomorphological classification are as follows: Beaches, Cliffs, Low rocky coastline, Lowlands subject to flooding and Coastal areas marked by humans.

The differences between the various coastal areas are clearly visible. While there are no shortage of cliffs and lowlands subject to flooding in the North (Bay of Biscay and Atlantic), in the South Atlantic the latter are the predominant type of coastline.

The Mediterranean is characterised by its abundance of Beaches, while the Canary Islands boasts cliffs and low rocky coastline, while lowlands subject to flooding are practically non-existent.

The Spanish coast is made up of 18% beaches, 20% cliffs, 21% low rocky coast, 28% lowlands subject to flooding and 13% coastal areas marked by humans.

BREAKDOWN OF TYPES OF COAST IN EACH AREA OF THE SPANISH COASTLINE



SOURCES

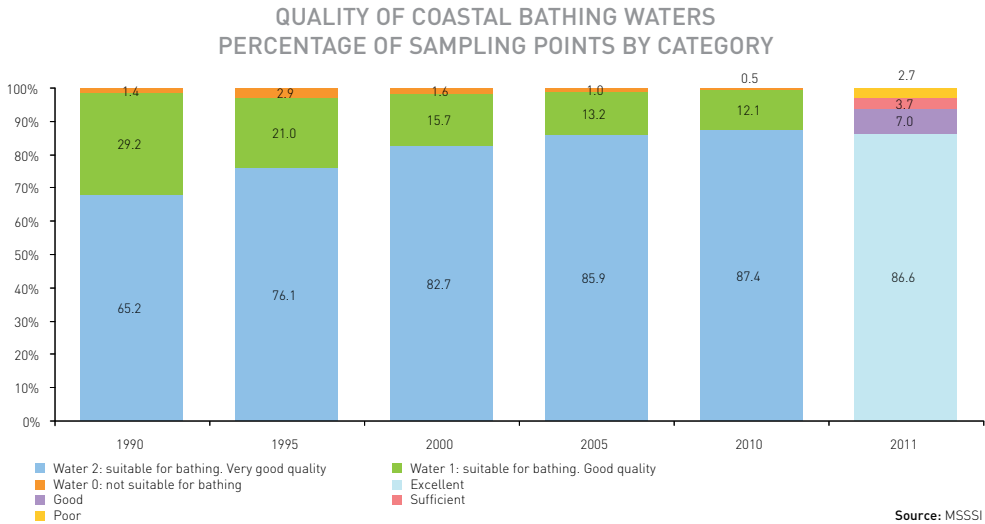
- Directorate-General of Coast and Marine Sustainability. MAGRAMA.

FURTHER INFORMATION

- <http://www.magrama.gob.es>

Quality of coastal bathing waters

The criteria of the new legislation on bathing waters were applied for the first time in the 2011 bathing season. Bathing water quality is outstanding in 86.6% of cases



In the 2011 bathing season, data were obtained from 1,924 sampling points, from which 1,920 SP were classed with the following results:

CAs	Excellent	Good	Sufficient	Poor	Total
Total	1,663	134	71	52	1,924

A total of 81,715 analytical observations were used in the 2008-2011 data series, including scheduled control observations and replacement samples. A total of 43,188 observations in coastal waters were employed.

NOTES

- In accordance with the terms of Directive 76/160/EEC, concerning the quality of bathing water, the Ministry of Health, Social Policy and Equality submits an Annual Summary Report of Bathing Water Quality in Spain to the European Commission. This describes the key findings of hygiene monitoring of such waters carried out by regional governments and the Autonomous Cities of Ceuta and Melilla in accordance with Royal Decree 734/88 of 1 July.
- On 15 February 2006, the new Bathing Water Quality Directive (2006/7/EC) was approved. Among other aspects, this Directive modifies the current bathing water classification system, establishing four assessment categories (excellent, good, sufficient and poor), reducing the number of parameters considered and defining water quality at each point using a three-year average. This Directive was transposed into Spanish law by Royal Decree 1341/2007.
- Under the new Directive, classification should be performed using data from the current season together with the data for the last three years. The new classification is as follows: poor, sufficient, good and excellent.
- This new classification has been carried out for the first time this bathing season (2011) and reports data from that year and the three previous years: 2008, 2009 and 2010.

SOURCES

- Data provided by the Sub-Directorate-General for Environmental Health and Health and Safety at Work. Ministry of Health, Social Services and Equal Opportunities.

FURTHER INFORMATION

- <http://nayade.msc.es/Splayas/home.html>
- <http://ec.europa.eu>