

# COMPLAINT TO THE EUROPEAN COMMISSION IN RELATION TO INFRINGEMENTS OF COMMUNITY LAW

**Addressed to:**

**Commission des Communautés européennes  
(Secretary-General)  
B-1049 Bruxelles  
BELGIUM**

**1. Surname and forename of the complainant:**

Richartz, Saskia

on behalf of the Greenpeace European Unit

**2. Where appropriate, represented by::**

N/A

**3. Nationality:**

Greenpeace European Unit is a Belgian registered ASBL; working in the context of the global organisation, Greenpeace.

Nationality of Ms Richartz: German

**4. Address or Registered Office of the complainant**

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**5. Telephone/Fax/E-Mail of the complainant:**

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**6. Field and place(s) of activity**

Greenpeace is an environmental civil society organisation, which seeks to:

- \* Protect biodiversity
- \* Prevent pollution and abuse of the earth's ocean, land, air and fresh water
- \* End all nuclear threats
- \* Promote peace, global disarmament and non-violence.

Greenpeace exists to expose environmental criminals, and to challenge governments and corporations when they fail to live up to their mandate to safeguard our environment and our future.

In pursuing its mission, Greenpeace has no permanent allies or enemies. Greenpeace promotes open, informed debate about society's environmental choices. Greenpeace

uses research, lobbying, and quiet diplomacy to pursue its goals, as well as high-profile, non-violent confrontation to raise the level and quality of public debate.

Greenpeace European Unit is part of the international Greenpeace network, active in over 40 countries worldwide. Based in Brussels, Greenpeace European Unit monitors and analyses the work of the EU institutions, exposes deficient EU policies and laws, and challenges EU decision-makers to implement progressive solutions.

Greenpeace is independently funded and does not accept donations from governments, corporations or political parties. Greenpeace relies solely on contributions from individual supporters and foundation grants. Greenpeace has been actively campaigning against environmental degradation since 1971.

**7. Member State or public body alleged by the complainant not to have complied with Community law:**

Greece, Italy, Spain and France. For detail see Table 1.

**8. Fullest possible account of facts giving rise to complaint:**

Please, see summary and table at the beginning of the complaint (pages 4 to 6)

**9. As far as possible, specify the provisions of Community law (treaties, regulations, directives, decisions, etc.) which the complainant considers to have been infringed by the Member State concerned:**

The infringements relate to the EU Habitats Directive (92/43/EEC), in particular Articles 3, 4 and 6.

We further raise some concerns in relation to the implementation of the Mediterranean Regulation (1967/2006/EC), in particular Article 4, and provisions for the protection of posidonia seagrass meadows under the Barcelona Convention.

**10. Where appropriate, mention the involvement of a Community funding scheme (with references if possible) from which the Member State concerned benefits or stands to benefit, in relation to the facts giving rise to the complaint**

N/A

**11. Details of any approaches already made to the Commission's services (if possible, attach copies of correspondence):**

N/A

**12. Details of any approaches already made to other Community bodies or authorities (e.g. European Parliament Committee on Petitions, European Ombudsman). If possible, give the reference assigned to the complainant's approach by the body concerned:**

N/A

**13. Approaches already made to national authorities, whether central, regional or local (if possible, attach copies of correspondence):**

**13.1** Administrative approaches (e.g. complaint to the relevant national administrative authorities, whether central, regional or local, and/or to a national or regional ombudsman):

**N/A**

**13.2** Recourse to national courts or other procedures (e.g. arbitration or conciliation). (State whether there has already been a decision or award and attach a copy if appropriate):

**N/A**

**14. Specify any documents or evidence which may be submitted in support of the complaint, including the national measures concerned (attach copies):**

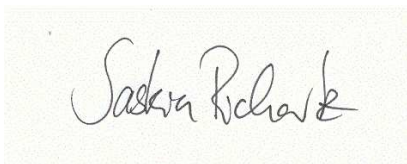
**References to supportive articles and document are provided within the text and two annexes are included in the complaint:**

- **Annex 1**
- **Annex 2**

**15. Confidentiality (tick one box)<sup>1</sup>:**

- x "I authorise the Commission to disclose my identity in its contacts with the authorities of the Member State against which the complaint is made."

**16. Place, date and signature of complainant/representative:**



**Saskia Richartz  
Greenpeace European Unit  
EU Oceans Policy Adviser**

**Brussels, 26 May 2009**

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<sup>1</sup> Please note that the disclosure of your identity by the Commission's services may, in some cases, be indispensable to the handling of the complaint.

## SUMMARY OF THE COMPLAINT:

**Greenpeace herewith files an official complaint<sup>2</sup> with the European Commission asking it to enforce Community conservation laws in relation to the protection of Mediterranean seagrass meadows. Greenpeace provides documentation that shows that French, Greek, Italian and Spanish authorities have violated community law by failing to provide adequate protection for seagrass meadows.**

In particular, Greenpeace argues that the authorities of respective countries have:

- failed to comply with Articles 3 and 4, as regards the identification of the geographical extent and ecological representativity of posidonia meadows within their territory;
- failed to submit relevant candidate sites in accordance with Article 3 and 4 for the list of sites of Community importance;
- failed to protect posidonia meadows, in the absence of site proposals, site designations and, where sites have been designated, in the absence of full and effective management; and/or
- failed to comply with Article 6, and in particular Article 6(4) provisions relating to the carrying out of plans or projects in spite of a negative assessment of the implications for the site, and the application of compensatory measures, which should be applied only after an opinion of the Commission has been delivered.

The following table summarises in short the argumentation that is outlined in further detail below:

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<sup>2</sup> The official complaint is a tool installed by the European Commission to enable citizens of Europe to bring law infringements to the attention of the Commission. It does not lead to a court procedure, but the Commission has committed itself to scrutinising and answering each complaint launched. Often, complaints are then followed by proceedings against a Member State taken by the Commission in the European Court of Justice.

**Table 1: Summary of the infringements that are brought to the attention of the Commission.**

(detailed description in the main body of the complaint)

	<b>France</b>	<b>Italy</b>	<b>Greece</b>	<b>Spain</b>
<b>Identification of sites hosting posidonia meadows on the basis of criteria listed in Annex III (Stage 1).</b>	N/A	There are indications for geographic insufficiencies in Italy's efforts to map or otherwise assess the distribution and state of posidonia in its maritime territories.	Greece has not mapped the extent of posidonia on its territory. This would appear to be a gross violation of the spirit and provisions of the Habitats Directive.  Greenpeace submits evidence that shows that Greece has mapped as little or less than 10-20% of the estimated total presence of posidonia meadows in Greece.	N/A
<b>Notification of relevant candidate sites in accordance with Article 3 and 4 for inclusion on the list of sites of Community importance</b>	N/A	There are geographic insufficiencies in Italy's site notifications, in particular with regards to the coasts of Tuscany, Sardinia and possibly Sicily.	Greece has not been in a position to meet its obligation under Article 3 and 4 of the Directive, as it has not mapped or analysed the full extent of posidonia meadows in its waters.  Greenpeace further submits evidence that shows that a number of ecologically important and representative sites have not been notified to the European Commission.	N/A
<b>Ensuring the protection of posidonia meadows, whether in the absence of site proposals and/or full</b>	For France, just one example in Corsica is being put forward as evidence for the destruction of posidonia meadows as a result of	A number of case studies show that posidonia meadows within and outside Natura 2000 sites have not been adequately protected	Greenpeace submits that large areas of posidonia that are known to occur along the Greek coast, but have not been mapped, are not being	A large number of case studies show that posidonia meadows in proposed as well as confirmed Natura 2000 sites have not been

<p><b>site designations, or, where sites have been designated, in the absence of full and effective site management</b></p>	<p>coastal construction projects and anchoring. In light of this and the evidence presented for Spain and Italy, Greenpeace requests that the Commission assesses France's compliance with the Habitats Directive as regards the protection of posidonia.</p>	<p>and are being damaged by e.g. boat anchors, trawl fishing etc.</p>	<p>protected. Consequently, Greece is in breach of the Habitats Directive, as well as the Mediterranean Regulation.</p>	<p>adequately protected, and that posidonia meadows outside Natura 2000 sites are also being damaged.</p> <p>The cases Greenpeace presents are just exemplary of numerous and large-scale breaches of the rules on posidonia protection.</p>
<p><b>Compliance with Article 6(4) provisions relating to the carrying out of plans or projects in spite of a negative assessment of the implications for the site, and the application of compensatory measures, which should be applied only after an opinion of the Commission has been delivered</b></p>	<p>Greenpeace submits that France has failed in meeting its responsibilities under Article 6(4) as regards the obligation to request a Commission opinion prior to authorising projects that damage posidonia habitats for reasons of so-called overriding public interest.</p>	<p>Greenpeace submits that construction projects and other plans or projects are being given the go-ahead, using transplantation schemes as a 'compensatory measure' despite negative results. Greenpeace further submits that Italy has failed in meeting its responsibilities under Article 6(4), in particular with regards to requesting a Commission opinion.</p>	<p>N/A</p>	<p>Greenpeace submits that construction projects and other plans or projects are being given the go-ahead, using transplantation schemes as a 'compensatory measure' despite negative results. Greenpeace further submits that Spain has failed in meeting its responsibilities under Article 6(4), in particular with regards to requesting a Commission opinion.</p>

## COMPLAINT IN DETAIL:

Greenpeace is concerned that, in spite of the ecological significance of posidonia meadows and their priority protection status under Community law and multilateral agreements, Mediterranean coastal states have failed to provide adequate protection for Mediterranean seagrass meadows. This document argues that French, Greek, Italian, and Spanish authorities have:

- failed to comply with Articles 3 and 4, as regards the identification of the geographical extent and ecological representativity of posidonia meadows within their territory;
- failed to submit relevant candidate sites in accordance with Article 3 and 4 for the list of sites of Community importance;
- failed to protect posidonia meadows, in the absence of site proposals, site designations and, where sites have been designated, in the absence of full and effective management; and/or
- failed to comply with Article 6, and in particular Article 6(4) provisions relating to the carrying out of plans or projects in spite of a negative assessment of the implications for the site, and the application of compensatory measures, which should be applied only after an opinion of the Commission has been delivered.

While not every country is equally implicated by each of the above shortcomings, the overall picture is that the protection of posidonia meadows is inadequate in all of the above EU Member States, and that most or all provisions under the EU's Habitats Directive (92/43/EEC) relating to posidonia meadows are insufficiently implemented. **Greenpeace therefore requests the European Commission to assess the level of compliance in each of the individual cases outlined in detail below. In particular, we request that the Commission prioritises an urgent assessment of the ecological consequences of the practice of posidonia transplantation, which appears detrimental to the conservation status of posidonia in the Mediterranean. Section 3 provides relevant information to this effect.**

**Greenpeace is further concerned that there already is evidence that suggests that the same Member States are also failing to implement measures to protect posidonia meadows under the Common Fisheries Policy, notably the Mediterranean Regulation (1967/2006/EC). We have not collated evidence to be able to formalise a detailed complaint, but request that the Commission considers this when assessing all Mediterranean Member States' efforts to protect posidonia.**

**In an attempt to respond to suggestions from the European Commission, we have tried to keep our complaint broad and thematic in order to point at systematic failures in implementation, rather than focus on a case-based analysis. We request that it is considered in the same manner and with the same seriousness as a complaint submitted in relation to a single issue or cause.**

The EU's Habitats Directive lists posidonia meadows as a priority habitat of Community interest, whose conservation requires the designation of special areas of conservation (SACs). In addition, Article 4 of the Mediterranean Regulation states that *"fishing with trawl nets, dredges, purse seines, boat seines, shore seines or similar nets above seagrass beds of, in particular, Posidonia oceanica or other marine phanerogams shall be prohibited,"* and that Member States *"shall take appropriate steps to ensure the collection of scientific information with a view to the identification and mapping of habitats."* Certain derogations may be granted as part of specific management plans or if authorised by the European Commission in line with specific conditions, but in principle posidonia meadows should be identified and protected from bottom fisheries.

The Mediterranean seagrass, *Posidonia oceanica* (L.) Delile, is considered one of the most important species forming Mediterranean coastal habitats. The species belongs to the group of flowering plants (Magnoliophyta or Angiospermae; superior plants) and forms an important and recognisable habitat type – i.e. so-called posidonia meadows or beds. Although the species is recognised as a priority habitat for conservation in the EU, it is experiencing significant and widespread declines in the Mediterranean basin.<sup>3</sup> It is estimated that the Mediterranean hosts some 50,000 square kilometres of *Posidonia oceanica* beds, but scientists warn that these “are disappearing at an annual rate of 5 per cent”.<sup>4, 5</sup> The situation is particularly concerning as *Posidonia oceanica* is a long-lived, slow-growing plant (it grows around two centimetres a year) with low seed production. Any loss of this habitat can be considered close to irreversible, as recovery may take several centuries.<sup>6</sup> Climate change impact, such as rising sea water temperatures, further augment other anthropogenic pressures.<sup>7</sup>

The specific relevance of *Posidonia oceanica* for biological communities in the coastal zone of the Mediterranean Sea has been widely recognised and described in scientific publications, in particular its importance in serving as a nursery ground for many fish and invertebrate species, including those of commercial interest, and in protecting the coastline from erosive forces. More than 1,200 different species are known to live in close association with posidonia.

Subsequent sections outline in detail the precise nature of the complaint per country and issue.

## 1. Failure to comply with Articles 3 and 4 as regards the identification and notification of sites in need of protection

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### 1.1 Site identification

Annex I (point 1.11-1120) of the EU’s Habitats Directive (92/43/EEC) lists posidonia meadows as a priority habitat. This means that it is considered:

- **a habitat of community interest**, which must be maintained at or restored to a favourable conservation status under Articles 2, 3 and 4 of the Directive, and whose conservation requires the designation of special areas of conservation under Article 3 and 4, and Annex I of the Directive; and
- **a habitat in danger of disappearance** (Article 1), for which the Community has particular responsibility under the Directive.

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<sup>3</sup> Cardilio M., et al., 2007. Proceeding of the 3rd Mediterranean Symposium on Marine Vegetation Marseilles 27-29 March 2007. UNEP Mediterranean Action Plan. Regional Activity Centre for Specially Protected Areas. pp305.

<sup>4</sup> Salud Deudero (Universidad de las Illes Balears) communication to Diariodelbiza, 2006. Descubierta en Formentera una posidonia de ocho kilómetros, el organismo vivo más grande del mundo. Diariode Ibiza. Pitiüses i Balears, Sábado 27 de mayo de 2006. Via: <http://www.diariodeibiza.es/secciones/noticia.jsp?pldNoticia=110879&pldSeccion=2&pNumEjemplar=2721&pFechaEjemplar=null>

<sup>5</sup> Núria Marbà, a researcher at the Mediterranean Institute for Advanced Studies (Imedeia), notes that “most Mediterranean meadows of *Posidonia oceanica* – extremely valuable ecosystems for the functions and services they provide – have experienced severe shrinkage in the last 40 years”. Summarising the results of the ‘Praderas Project’, funded by the BBVA Foundation, she said: “We have observed a rise in mortality among some marine angiosperm species in the aftermath of heat waves, suggesting that meadow decline will accelerate as the seawaters continue to warm.” The studies carried out show that seagrass meadows along the Spanish coast are decreasing by about 5% each year, and more in e.g. 2003, when the sea temperature rose above normal. See <http://www.sciencedaily.com/releases/2007/10/071020090707.htm>

<sup>6</sup> Salud Deudero (Universidad de las Illes Balears – UIB-) communication to Diariodelbiza, 2006. Descubierta en Formentera una posidonia de ocho kilómetros, el organismo vivo más grande del mundo. Diariode Ibiza. Pitiüses i Balears, Sábado 27 de mayo de 2006. Via: <http://www.diariodeibiza.es/secciones/noticia.jsp?pldNoticia=110879&pldSeccion=2&pNumEjemplar=2721&pFechaEjemplar=null>

<sup>7</sup> Cardilio M., et al., 2007. Proceeding of the 3rd Mediterranean Symposium on Marine Vegetation Marseilles 27-29 March 2007. UNEP Mediterranean Action Plan. Regional Activity Centre for Specially Protected Areas. pp305.



The Preamble of the Directive further specifies that “*in view of the threats to certain types of natural habitat and certain species, it is necessary to define them as having priority **in order to favour the early implementation of measures to conserve them***” (preamble). In other words, the identification, designation and protection of posidonia meadows (along with any other priority habitat type or species) should have been prioritised by Member States.

The European Court of Justice (ECJ), e.g. in cases C-71/99 and C-220/99, further clarifies that “*in order to produce a draft list of sites of Community importance, capable of leading to the creation of a coherent European ecological network of SACs, the Commission must have available an **exhaustive list of the sites** which, at national level, have an ecological interest which is relevant from the point of view of the Directive’s objective.*”

In other words, the Member States would need to identify and submit information about all areas that host posidonia meadows and that:

- are either representative of the (range of) typical posidonia meadows in that country, in particular taking account of the best examples in extent and quality of the posidonia meadows (proper and if appropriate its main variants); and/or
- cover a substantive part of the overall area of posidonia meadows in that country, with a view to designating a suitable proportion of the habitat type overall; and/or
- display a degree of conservation/naturalness of the structure and functions of the natural habitat type concerned and/or restoration possibilities.

**A thorough assessment of the ecological status and the mapping of the habitat type in question would therefore appear to be a prerequisite for identifying relevant sites and submitting an exhaustive list.**

The European Commission’s guidelines for the establishment of the Natura 2000 network in the marine environment (May 2007), suggest that “*given the lack of more detailed biological data, the identification of Natura 2000 sites in marine areas away from the coast has to be based on more general geological, hydrological, geomorphological and biological data than is the case for coastal or terrestrial areas.*” It further reports that “*for all of the marine habitats on Annex I to the Directive, methodology exists for identifying the location and undertaking physical and ecological assessment of the areas required, although existing data may be sparse or absent in some sea areas (particularly in deep waters hundreds of miles from the coast).*”<sup>8</sup> The effectiveness and common use of these tools to identify the location of posidonia are also described in a series of peer reviewed articles<sup>9</sup> and have been successfully applied in many areas, such as around the Balearics ([http://lifeposidonia.caib.es/user/cartos/cos\\_en.htm](http://lifeposidonia.caib.es/user/cartos/cos_en.htm)). **This provided, it would appear unjustified that there has been a delay of more than eleven years in identifying sites for the protection of priority habitats (or species), not least posidonia meadows.**

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<sup>8</sup> According to the guidelines, the following two steps should be used to locate Annex I habitats:

1. Using available physical information mapped at a regional scale, such as modelled geological seabed data, bathymetric data (e.g. IOC et al. 2003), physical oceanographic data, navigation or naval charts (where they show seabed type), to predict the location of potential Annex I habitat.

2. Refine and add to this information using more localised remote sensing datasets such as side scan sonar, acoustic ground discrimination system (AGDS) surveys, multibeam bathymetric survey, aerial photography or satellite images (for some habitats in very shallow water only, such as seagrass beds or maerl). Such remote sensed data will need to be validated in the field (ground truthed) by direct sampling of sediment and/or biota (grab/core sampling, diver survey, benthic trawls) or by remote observation (video, photography, Remote Operated Vehicles). As well as ground validation, data obtained from direct sampling will also be used to assess the biota of the Annex I habitat directly.

<sup>9</sup> For example: V. Pasqualini (2003) Mapping of Posidonia oceanica using Aerial Photographs and Side Scan Sonar: Application off the Island of Corsica (France). Estuarine, Coastal and Shelf Science, Volume 47, Issue 3, Pages 359 – 367, AND, Robert Turk (2003) Report on activities for long-term conservation of the posidonia oceanica meadow in Slovenia [http://www.zrs-kp.si/en/Zaloznistvo/annales/Anali\\_Naturalis13-2003-2/delo\\_nasih\\_zavodov\\_in\\_drustev/02robert\\_turk.pdf](http://www.zrs-kp.si/en/Zaloznistvo/annales/Anali_Naturalis13-2003-2/delo_nasih_zavodov_in_drustev/02robert_turk.pdf)

It is thus a concern that **Greece** has not yet mapped the distribution of posidonia meadows, nor assessed their ecological status, in most or all of its marine territory. Posidonia meadows have only been mapped in 57 of Greece's marine and coastal Natura 2000 sites.<sup>10</sup> This is in spite of strong evidence that posidonia is also present in a further 50 to 100 existing Natura 2000 sites. These areas have not yet been mapped. Moreover, most other parts of the coast – not contained in Greece's notifications to the European Commission - have neither been assessed, nor mapped, even though scientific papers and some unpublished data suggest that posidonia meadows are present in these geographic locations.

For instance, Panayotidis *et al.* (2006) suggest that as little as 10-20% of the total presence of posidonia meadows along the Greek coastline have been mapped.<sup>11</sup> This inadequacy of data on the distribution and state of posidonia meadows in Greece is also confirmed by the European Topic Center's online database on the biogeographical assessments of conservation status for species and habitats reported by Member States. This suggests that data on range and area coverage are unknown and the status, structure and functions is considered inadequate.<sup>12</sup>

Responding to a request from the Coastal Fishermen Federation in Sterea Ellada and Evoia, the Hellenic Centre for Marine Research (HCMR) recently undertook a habitat mapping project in a proposed Natura 2000 site in the **Gulf of Corinth (GR2450004; Nafpaktos to Itea)**.<sup>13</sup> The interest and goal of the fishermen was to improve the implementation of the Mediterranean Regulation (EC 1967/2006) in the area. Priority was given to the surveying and mapping of posidonia and *Cymodosea nodosa* seagrass meadows. The area studied covers 24,885 acres and extends in depths from 0 to 50 meters. It was found that the site comprises important posidonia meadows, previously unmapped and unaccounted for in Greece's Natura 2000 submission. Denser meadows comprise 8% of the total study area. While this is not huge, the meadows are significant and hugely important for the sustainability of fisheries in a semi-enclosed sea, such as the Gulf of Corinth. The results and the maps were submitted to the Ministry of Agriculture and Fisheries.

Moreover, in June 2008, Greenpeace supported an initiative undertaken by the Federation of Coastal Fishermen in the **Cyclades islands** to map posidonia meadows in their fishing grounds. Fishermen themselves were keen to protect these meadows from the destructive impacts of towed gear. Greenpeace collaborated with the posidonia expert, Dr. Panos Panagiotidis, from the Hellenic Centre for Marine Research (HCMR) and a team of divers. The team completed the mapping of two areas at the southeast part of Andros Island. The results show that a large percentage of these two areas are covered by the posidonia. The maps were submitted to the Ministry at the beginning of 2009 and can be found on:

<http://www.greenpeace.org/raw/content/greece/press/118523/andros-kyklades.pdf>

The results and the maps were submitted to the Ministry of Agriculture and Fisheries.

Given that posidonia meadows are classed as a priority Community habitat with a view to "favour the early implementation of measures to conserve them" (Preamble of the Directive), **it would appear that the fact that Greece has not yet mapped the distribution of posidonia**

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<sup>10</sup> Ministerial decision 167378 issued at the official Government Gazette (241 4/6/2007). According to the Natura 2000 Barometer, Greece had notified 102 marine sites as of 17 December 2007.

<sup>11</sup> Panayotidis P.; Orfanidis, S.; Siakavara, A.; Haritonidis, S.; Drakopoulou, P. (2006) Cartography of Posidonia meadows in the Aegean Sea (NE Mediterranean). Mediterranean Seagrass Workshop, Malta, 2006.

<sup>12</sup> <http://biodiversity.eionet.europa.eu/article17/habitatsummary/?group=Y29hc3RhbCB0eWYwdGF0cWw%3D%3D&habitat=1120&region=MMED> Spain has not yet reported its data.

<sup>13</sup> Drakopoulou P., Kyriakidou Ch., Panagiotidis P. (2009), Mapping of Posidonia & Cymodosea seabeds in marine front from Nafpaktos to Itea, Proceedings of the 9th Hellenic Symposium on Oceanography & Fisheries, Volume I, pp 572-573.

meadows, sixteen years after the adoption of the Directive, is a gross violation of the spirit and provisions of the Directive. Not having mapped the habitat, Greece cannot fulfil its obligations under the Habitats Directive (as argued further below). In addition, Italy, too, would appear to have gaps in its mapping efforts. These can be described as geographic insufficiencies (see below).

## 1.2 Site notification

In accordance with Article 3 of the Directive, each Member State should have contributed to the creation of a coherent European ecological network of special areas of conservation, known as Natura 2000, “*in proportion to the representation within its territory of the natural habitat types and the habitats of species referred to in the Directive*”. A list of candidate sites, including site information and maps, should have been submitted to the European Commission within three years of the notification of the Directive, i.e. by 1995. All sites should have been assessed before adopting a consolidated list of sites of Community importance within 6 years of the notification of the Directive, i.e. by 1998. **Clearly, these deadlines have not been met and delays in implementation have been significant (in excess of ten years) and detrimental in the case of a number of posidonia meadows.**

Member States should have classified candidate sites according to the sites’ relative value for the conservation of each natural habitat type (or each species). As listed above, for habitat types in Annex I the following criteria must be applied (similar criteria exist for species):

- i) degree of representativity of the natural habitat type on the site;
- ii) area of the site covered by the natural habitat type in relation to the total area covered by that natural habitat type within national territory;
- iii) degree of conservation of the structure and functions of the natural habitat type concerned and restoration possibilities; and
- iv) global assessment of the value of the site for conservation of the natural habitat type concerned.

In Cases C-67/99 and C-71/99 and C-220/99 the ECJ has stated that in accordance with a combined reading of Article 4(1) and Annex III of the Directive, “*Member States enjoy a certain margin of discretion when selecting sites for inclusion in the list, so long as the requirements of the Directive and in particular of Annex III are being met*”. As has already been recalled above, the ECJ further stated that the Commission must have available “**an exhaustive list of the sites which, at national level, have an ecological interest which is relevant from the point of view of the Directive’s objective**”.

In Cases C-371/98 and C-67/99 the ECJ has further clarified that “*it follows from Article 1(e) and (i), read in conjunction with Article 2(1), that the favourable conservation status of a natural habitat or a species must be assessed in relation to the entire European territory of the Member States to which the Treaty applies. Having regard to the fact that, when a Member State draws up the national list of sites, it is not in a position to have precise detailed knowledge of the situation of habitats in the other Member States, it cannot of its own accord, whether because of economic, social or cultural requirements or because of regional or local characteristics, delete sites which at national level have an ecological interest relevant from the point of view of the objective of conservation without jeopardising the realisation of that objective at Community level. In particular, if the Member States could take account of economic, social and cultural requirements and regional and local characteristics when selecting and defining the boundaries of the sites to be included in the list which, pursuant to Article 4(1), they must draw up and transmit to the Commission, the Commission could not be sure of having available an exhaustive list of sites eligible as SACs, with the risk that the objective of bringing them together into a coherent European ecological network might not be achieved.*” In other words, the presumption is that all of the

sites that contain relevant, representative and good specimens of a particular habitat or species are put forward for protection, in particular if they are considered rare or at risk. Future management challenges should not be a determining element in the site selection process.<sup>14</sup>

It has further been agreed that the adequacy of site contributions from the Member States to the overall network would normally be assessed using the following guidance at EU level:<sup>15</sup>

- where a proposal covers less than 20% of the resource this would normally be considered inadequate;
- where it covers more than 60% it would normally be considered sufficient;
- for proposals that cover between 20 – 60%, the conclusions would need to be based in expert judgement in relation to the particular habitat or species concerned; and
- priority habitats and species would normally be expected to have the biggest level of representation in the network.

Sites containing priority habitats would normally be expected to meet one or more of the above criteria and should therefore be contained on the list that is submitted to the Commission. **In practical terms, Member States can be expected to work under the assumption that all of the areas that are covered by posidonia seagrass are candidate sites for protection, and that, rather than selecting the best specimens, Member States would simply identify those few, if any, sites that are of such low quality or poor ecological status that they may not meet any of the criteria contained in Annex III.**

Article 4(2) of the Habitats Directive further provides for the following specification: *“Member States whose sites hosting one or more priority natural habitat types and priority species represent more than 5 % of their national territory may, in agreement with the Commission, request that the criteria listed in Annex III (Stage 2) be applied more flexibly in selecting all the sites of Community importance in their territory.”* This would need to be assessed at a Member State level on the basis of an assessment of overall distribution of posidonia meadows, ideally through adequate mapping. However, as posidonia are limited to an intertidal range of 0 to 40 meters of depth, it is unlikely that posidonia would cover more than 5% of the national territory of individual Member States. In fact, a European seagrass monitoring and management handbook reports that posidonia meadows cover between 25,000 and 50,000 km<sup>2</sup>, which is equivalent to only 25% of the sea bottom at depths between 0 and 40 m.<sup>16</sup>

In 2006, the European Commission adopted a first list of sites of Community importance for the Mediterranean by means of Commission Decision 2006/613/EC. Annex 2 of this Decision identified Spain as the only Member State not to have completed its network of (proposed) protected areas as regards the coverage of posidonia beds. It follows that all other Member States were deemed to have completed their identification and notification process. More recently, however, the European Commission up-dated the Mediterranean list of sites by means of Commission Decision 2008/335/EC and Decision 2009/95/EC. The up-dated lists do not indicate any outstanding issues or areas of insufficient coverage. One can presumably assume, therefore, that the Mediterranean network of protected areas is considered sufficient, including areas covering posidonia meadows.

**Greenpeace submits that Decisions 2006/613/EC, Decision 2008/335/EC and Decision 2009/95/EC have not considered the full extent of information available, and that Greece and Italy have both failed to submit sufficient sites for the protection of posidonia**

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<sup>14</sup> See also the Guidelines for the establishment of the Natura 2000 network in the marine environment (May 2007)

<sup>15</sup> refer to document Hab 97/2 rev4, noting the following consideration: Hab 97/2 rev4 is not a specific reference document for the marine environment, and the figures mentioned are not specific targets for national contribution to the Natura 2000 network, which need to be assessed on a case by case basis.

<sup>16</sup> Borum, J.; Duarte, C.M.; Krause-Jensen, D; Greve, T.M. (2004) European seagrasses: an introduction to monitoring and management. The M&MS project <http://www.seagrasses.org>

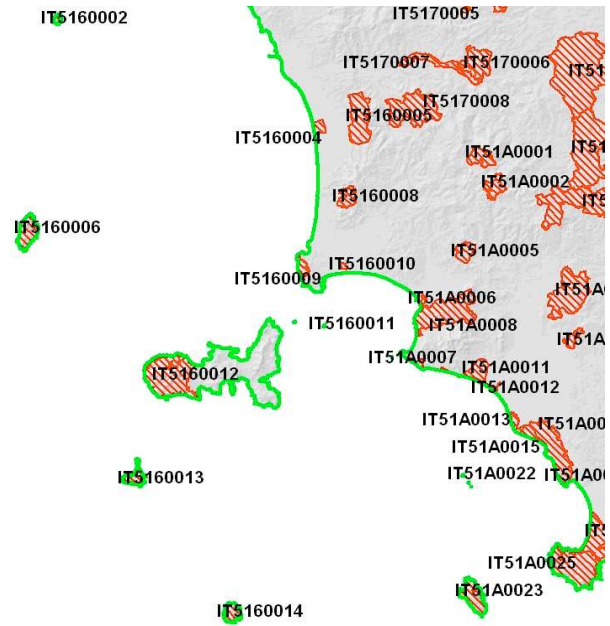
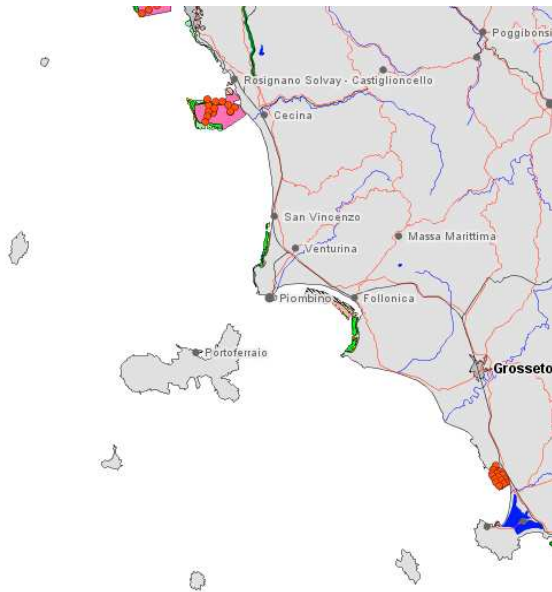
meadows in the Mediterranean. We further disagree with the information presented in the Commission's Technical Report on posidonia management (2008 01/24),<sup>17</sup> which suggests that Greece and Italy have proposed to designate sites that will cover 20.79% and 44.11% of the total surface area of posidonia respectively. These percentages can only relate to the area currently mapped, and not the total surface area of posidonia in the countries' respective territories.

Specifically, Greenpeace submits that, given the lack of mapping of posidonia, Greece has not been in a position to meet its obligation under Article 3 and 4 of the Directive. Greenpeace further submits that Italy's efforts to map or otherwise assess the distribution of posidonia are geographically insufficient, and consequently its site notifications are geographically insufficient too.

For instance, posidonia does not appear to have been mapped in the Tuscany Archipelago, nor have any sites for posidonia been notified (Map 1, left) despite the fact that these islands are known to host posidonia meadows. Moreover, along the main Tuscany coast, known posidonia meadows have not been included in the site notifications (Map1, right). It would further appear that notified sites along the coast of Sardinia, for example, do not sufficiently cover known posidonia meadows (see map 2). In fact, a closer comparison between the maps of known posidonia meadows and notified sites reveals further gaps. Given the priority status of posidonia, the Member States should have applied a system of site selection that assumes that the vast majority of sites would require protection and that only a small number of specific sites may be identified where full site protection would not need to be put in place. They certainly should have notified all sites to the Commission which qualify for protection.

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<sup>17</sup> Díaz-Almela E. & Duarte C.M. 2008. Management of Natura 2000 habitats. 1120 \*Posidonia beds (Posidonion oceanicae). European Commission



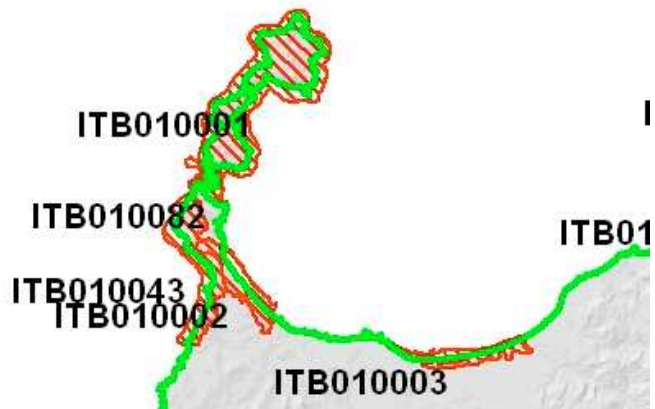
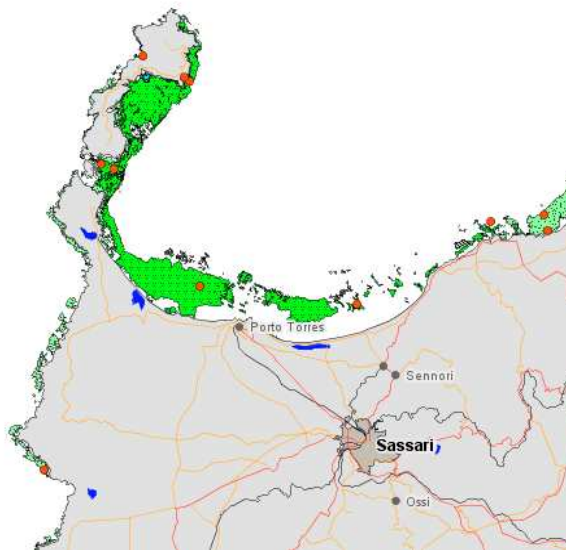
**Map 1:**

Available habitat maps (left) show that posidonia has not yet been mapped around these islands of the Tuscany Archipelago. Moreover, where posidonia meadows have been mapped along the main coast, these have not been included in the proposed sites (right).

<http://www.tutelamare.it/cocoon/posidonie/app/it/index.html>

[ftp://ftp.scn.minambiente.it/Cartografie/Natura2000/schede\\_e\\_mappe/Toscana/sic%20toscana.jpg](ftp://ftp.scn.minambiente.it/Cartografie/Natura2000/schede_e_mappe/Toscana/sic%20toscana.jpg)

[http://www2.minambiente.it/Sito/settori\\_azione/scn/rete\\_natura2000/elenco\\_cartografie/sic/mappe/IT5160011.jpg](http://www2.minambiente.it/Sito/settori_azione/scn/rete_natura2000/elenco_cartografie/sic/mappe/IT5160011.jpg)



**Map 2:**

Available habitat maps (left) show large areas covered by posidonia meadows (green), but these have not been included in the proposed sites (right)

<http://www.tutelamare.it/cocoon/posidonie/app/it/index.html>

[ftp://ftp.scn.minambiente.it/Cartografie/Natura2000/schede\\_e\\_mappe/Sardegna/sic%20sardegna.jpg](ftp://ftp.scn.minambiente.it/Cartografie/Natura2000/schede_e_mappe/Sardegna/sic%20sardegna.jpg)

**Italy's** mapping efforts and site notifications for posidonia should therefore urgently be assessed as to their sufficiency, not least by comparing existing notifications with e.g. results from mapping efforts in the 1990s and 2000s. The Si.Di.Mar. website lists the following mapping programmes:

“The first programme of posidonia mapping in the 1990s covered 5 Italian regions: Liguria, Toscana, Lazio, Basilicata e Puglia. 64 meadows were identified for a total extension of 90913 hectares: 25 meadows in Liguria, of which only 2,5% of the total surface of meadows in the region were found to be in good state, with others in poor or bad state; in Tuscany 7 meadows were identified, only 44% of the total extension was found to be in good conditions; in Lazio 15 meadows were identified, with 20% good state; in Puglia 16 meadows were identified, with 65% good state; only 1 site was identified in Basilicata which was in a poor state.<sup>18</sup> Between 1999 and 2002 posidonia meadows were mapped along the coast of Sicily and certain islands<sup>19</sup> (60 meadows found) and Sardegna<sup>20</sup> (14 meadows). Between 2002 and 2004, posidonia meadows were mapped for the coast of Campania (36 meadows), and Calabria (30 meadows)”<sup>21</sup>.

For posidonia distribution maps see <http://www.tutelamare.it/cocoon/posidonie/app/it/index.html>

See also:

- Piazzari et. al. (2000) Mapping of Posidonia oceanica beds around Elba Island (western Mediterranean) with integration of direct and indirect methods  
<http://140.112.69.39/~pkliu/bookstore/2nd/Mapping%20of%20Posidonia%20oceanica%20beds%20around.pdf>
- L Piazzari, S Acunto, I Papi, G Pardi, F Cinelli (2000) Mapping of the seagrasses beds in Tuscany (Italy): situation in 1998. *Biologia Marina Mediterranea*
- M. Lenzi , R. Roffilli, M. De Pirro, P. Micarelli, E. Franchi, F. Borghini, S. Focardi (2006) The meadows of posidonia oceanica (L.) delile along the Tuscany southern coast. *Biol. Mar. Medit.* (2006), 13 (4): 51-5

In light of the evidence and argumentation provided for the lack of mapping in Greece and Italy, Greenpeace requests that the Commission also assesses whether the maps used by France and Spain are sufficient to judge the extent and suitability of site notifications.

## **2. Failure to protect posidonia meadows, in the absence of site proposals, site designations and, where sites have been designated, in the absence of full and effective management**

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Posidonia meadows are being impacted on by a number of different activities, all or most of which are directly or indirectly linked to the growing number of people that live close to or visit the Mediterranean coasts. The most prominent impacts arise as a result of construction projects, fisheries, in particular bottom trawl fisheries, and pollution, including inflows of toxic and nutrient rich waste water, and the disposal at sea of garbage and other material from land and ships.

The ELME project under the EU's Sixth Framework Programme on European Lifestyles and Marine Ecosystems has identified over 140 sites in the Mediterranean where posidonia meadows

<sup>18</sup> Si.Di.Mar. webpage: [http://www.sidimar.tutelamare.it/praterie\\_posidonia.jsp](http://www.sidimar.tutelamare.it/praterie_posidonia.jsp)

<sup>19</sup> AAVV (2002) - Mappatura delle praterie di Posidonia oceanica lungo le coste della Sicilia e delle Isole minori circostanti. Ministero dell'Ambiente – Servizio Difesa del Mare.

<sup>20</sup> AAVV (2002) - Mappatura delle praterie di Posidonia oceanica lungo le coste della Sardegna e delle Isole minori circostanti. Ministero dell'Ambiente – Servizio Difesa del Mare.

<sup>21</sup> Si.di.mar., 2008. Available via: [http://www.sidimar.tutelamare.it/praterie\\_posidonia.jsp](http://www.sidimar.tutelamare.it/praterie_posidonia.jsp)

have been damaged as a result of human activities (see Annex II).<sup>22</sup> Most of these are situated within the territories of EU Member States. The project team further estimated that at least 44,625 ha of Mediterranean seagrass meadows were lost over the last 100 years, which equates to an average of more than one hectare of seagrass lost per day. The results show that the rate of loss is increasing, and is likely to be an underestimate since much of the habitat remains unmapped and unstudied.

Under Article 6(2), Member States are to take appropriate steps to avoid the deterioration of natural habitats and the habitats of species, as well as the disturbance of species for which areas have been selected. Any plan or project likely to have a significant effect is to be subject to appropriate assessment of its implications for the site (Article 6(3)). If the assessment is negative and there are no alternatives, but the project or plan is necessary for 'imperative reasons of overriding public interest', Member States are to take all compensatory measures necessary to ensure that the overall coherence of Natura 2000 is protected (Article 6(4)). Where the site hosts a priority habitat type or priority species, the reason for going ahead must be related to human health or public safety, be beneficial to the environment, or, further to an opinion of the Commission, relate to other imperative reasons of overriding public interest.

For sites formally designated as SACs, Member States are in addition required to establish the necessary conservation measures, such as management plans, statutory, administrative or contractual measures, reflecting the sites ecological requirements (Article 6(1)).

Moreover, candidate sites that have been notified to the Commission for designation also must be protected. In C-117/03, the ECJ explains that *"in the case of sites eligible for identification as sites of Community importance which are included in the national lists transmitted to the Commission and, in particular, sites hosting priority natural habitat types or priority species, the Member States are, by virtue of the Directive, required to take protective measures that are appropriate, from the point of view of the Directive's conservation objective, for the purpose of safeguarding the relevant ecological interest which those sites have at national level."*

The ruling further states that *"if those sites are not appropriately protected from that moment, achievement of the objectives seeking the conservation of natural habitats and wild fauna and flora, as set out in particular in the sixth recital in the preamble to the Directive and Article 3(1) thereof, could well be jeopardised. Such a situation would be particularly serious as priority natural habitat types or priority species would be affected, for which, because of the threats to them, early implementation of conservation measures would be appropriate, as recommended in the fifth recital in the preamble to the Directive."* **As mentioned above, there have been significant delays and insufficiencies in the designation of posidonia meadows and the implementation of conservation measures. It is therefore all the more important to insist that even candidate sites must be protected.**

The European Court of Justice (ECJ)<sup>23</sup> has further clarified that the appropriate protection regime applicable to sites which appear on a national list transmitted to the Commission, under Article 4(2) of the Directive, requires Member States not to authorise interventions which incur the risk of seriously compromising the ecological characteristics of those sites.

**However, we have been able to collate evidence that shows that, in reality, a number of case studies show that posidonia meadows within and outside (candidate and confirmed) Natura 2000 sites in Spain, and to a lesser extent France and Italy have not been adequately protected.**

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<sup>22</sup> [http://www.elme-eu.org/public/Results/p20-25\\_Mediterranean\\_Sea.pdf](http://www.elme-eu.org/public/Results/p20-25_Mediterranean_Sea.pdf) and <http://www.elme-eu.org/public/Questionnaire/QuestionnaireWP2Query.aspx>

<sup>23</sup> e.g. in Cases C-244/05



The online database of the European Topic Centre (ETC)<sup>24</sup> indicates that the area and range of posidonia meadows in **France** is stable or increasing. However, overall the conservation status is considered inadequate, in particular because the structure and functions, which are necessary for the long-term maintenance of posidonia meadows, are assessed as not being in a favourable or good condition. In **Italy**, the ETC considers the range of posidonia to be stable, but the area appears to be decreasing (inadequate). The structure and functions of posidonia meadows have not been adequately assessed. In **Greece**, both range and actual area covered are unknown, which confirms our opinion that Greece has failed to properly map posidonia in their waters. The structure and functions, which are necessary for the long-term maintenance of posidonia meadows, are assessed as not being in a favourable or good condition. **Spain** has not yet reported on the range, area and status of posidonia meadows.

In **Italy**, posidonia meadows along the **Lazio coast**, for instance, have been described as degraded or disappearing by, amongst others, Ardizzone *et al.* and Bouchette *et al.* (2007).<sup>25</sup> Bouchette *et al.* describe how the extent of posidonia meadows near *Porto di Terracina* declined from 7,290 ha in 1959, to 5,054 ha in 1980, 3,581 ha in 1990 and only 2,899 ha in 2005. In other words, it reduced by 60% between 1959 and 2005, 19% of which disappeared during the 1990s. The total loss of posidonia was 4391 ha in just under 50 years (see Map 3). Subsequently, in 2005, the area between Capo Circeo and Terracina was proposed as part of two Natura 2000 sites in May 2005. (**IT6000013** and **IT6000014**).<sup>26</sup>



**MAP 3:** Distribution of posidonia along the Lazio coast on 1959, 1980, 1990 and 2005.

[http://www.beachmed.it/Portals/0/Doc/documents/quaderni/QT\\_ITA\\_FA\\_WEB.pdf](http://www.beachmed.it/Portals/0/Doc/documents/quaderni/QT_ITA_FA_WEB.pdf)

Recent mapping of coastal seabed communities along the **Ligurian coast** also shows that in certain areas, including in Natura 2000 sites, large patches of partially or fully degraded posidonia meadow occur.<sup>27</sup>

<sup>24</sup> <http://biodiversity.eionet.europa.eu/article17/habitatsummary/?group=Y29hc3RhbCB0YWJpdGF0cw%3D%3D&habitat=1120&region=MMED> and

[http://www.bfn.de/fileadmin/MDb/documents/themen/natura2000/ec\\_guidance\\_2006\\_art17.pdf](http://www.bfn.de/fileadmin/MDb/documents/themen/natura2000/ec_guidance_2006_art17.pdf) Spain has not yet reported its data.

<sup>25</sup> G.D. Ardizzone, A. Belluscio. Le praterie di Posidonia oceanica delle coste laziali. In [http://www.osservatoriomare.lazio.it/Studi/Il%20Mare%20del%20Lazio/Le%20Praterie%20di%20Posidonia%20Oceanica%20delle%20Coste%20Laziali%20\(Benthos\).pdf](http://www.osservatoriomare.lazio.it/Studi/Il%20Mare%20del%20Lazio/Le%20Praterie%20di%20Posidonia%20Oceanica%20delle%20Coste%20Laziali%20(Benthos).pdf) see also <http://www.osservatoriomare.lazio.it/>

Fred Bouchette (Capofila), Cléa Denamiel, Alberto Lamberti, Silaios Yorgos, Marco Deserti, Giandomenico Ardizzone, Andrea Belluscio (2007) Caratterizzazione delle condizioni idrometeorologiche in zona litorale e analisi dei rischi costieri, del comportamento delle opere di difesa e della dinamica delle praterie di Posidonia oceanica. BEACHMED-e,2007. Study of the Univeristy La Sapienza, Roma. Available via:

[http://www.beachmed.it/Portals/0/Doc/documents/quaderni/QT\\_ITA\\_FA\\_WEB.pdf](http://www.beachmed.it/Portals/0/Doc/documents/quaderni/QT_ITA_FA_WEB.pdf)

<sup>26</sup> [http://www2.minambiente.it/Sito/settori\\_azione/scn/rete\\_natura2000/elenco\\_cartografie/sic/documenti/IT6000013.pdf](http://www2.minambiente.it/Sito/settori_azione/scn/rete_natura2000/elenco_cartografie/sic/documenti/IT6000013.pdf) and [ftp://ftp.scn.minambiente.it/Cartografie/Natura2000/schede\\_e\\_mappe/Lazio/SIC\\_mappe/IT6000014\\_100000\\_A4-oriz.jpg](ftp://ftp.scn.minambiente.it/Cartografie/Natura2000/schede_e_mappe/Lazio/SIC_mappe/IT6000014_100000_A4-oriz.jpg)

<sup>27</sup> Giovanni Diviacco and Stefano Coppo. Atlante degli habitat marini della Liguria. Regione Liguria, Genova 2006

Moreover, in 2007, Greenpeace documented the impacts of mooring lines and improperly installed buoys in Mola Bay, Elba. The mooring lines and anchor chains had caused physical damage through scraping, and the placing of concrete blocks on the seagrass had crushed parts of the meadow. Moreover, Greenpeace could confirm impacts of smothering as a result of outflows and runoffs from urban development. A thick layer of mud and *Caulerpa prolifera*, a green alga that is well-known for colonising destroyed posidonia habitats, covered and smothered the destroyed meadow. Clear signs of recent destruction of the seagrass meadow were the widespread occurrence of dead posidonia roots. It was further evident that the water was much more turbid than it should be under normal conditions, resulting in low visibility at a depth of just a few metres. Pictures to illustrate the damage can be found in Annex I. The area concerned has not been proposed for Natura 2000 protection.

Milazzo *et al.* (2004) and Montefalcone *et al.* (2006) describe similar cases of damage to posidonia meadows, indicating that different types of anchors and mooring systems result in different levels of protection.<sup>28</sup> The problem of damage to posidonia meadows through anchoring has also been documented in the case of e.g. French sites.<sup>29</sup>

In the National Park of Port-Cros, in **France**, Belsher *et al.* (2005) also report of damage caused by anchors. The part has been proposed as Natura 2000 site **FR9301613**.<sup>30</sup> In the same Natura 2000 site, on the island of **Porquerolles**, cruise ships too large to sail into the harbour anchor outside the harbour and inside a posidonia meadow in waters of 10-12 m depth. A study conducted in the area found that the meadow has been severely degraded (50-60% cover) by the anchors of cruise ships and by bottom trawling (“gangui” fishing gear).<sup>31</sup> In fact, in the vicinity and part of the same Natura 2000 site, the bay of Giens hosts one of the largest posidonia meadow in France, with a total surface of 18 km<sup>2</sup>. While the meadow is relatively good shape, experts have recommended a no fishing area to protect the site.<sup>32</sup>

Moreover, a planned port extension project (as of mid-2008 still under development) is thought to result in the damage to at least 100 hectares of posidonia meadow in and around the port of Bastia in Corsica’s north. The outcome of ongoing consultations and planning cycles is as yet unclear, the port extension should be halted.

In **Spain**, a number of sites with posidonia meadows have been destroyed, impacted or are under threat of destruction, mainly as a result of extension of marinas, commercial ports and desalination plants. Uncontrolled boat anchoring on posidonia seabed, including in or close Natura 2000 areas, is also a problem.

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<sup>28</sup> Milazzo, M., Badalamenti, F., Ceccherelli, G. and Chemello, R. (2004) Boat anchoring on Posidonia oceanica beds in a marine protected area (Italy, western Mediterranean): effect of anchor types in different anchoring stages. *Journal of Experimental Marine Biology and Ecology*, Volume 299, Issue 1, 10 February 2004, Pages 51-62 and M. Montefalcone; R. Lasagna; C. N. Bianchi; C. Morri; G. Albertelli (2006) Anchoring damage on Posidonia oceanica meadow cover: A case study in Prelo cove (Ligurian Sea, NW Mediterranean). *Chemistry and Ecology*, Volume 22, Issue S1 August 2006, pages S207 - S217

<sup>29</sup> Francour, P., Ganteaume, A., Poulain, M. (1999) Effects of boat anchoring in Posidonia oceanica seagrass beds in the Port-Cros National Park (north-western Mediterranean Sea). *Aquatic Conservation: Marine And Freshwater Ecosystems Aquatic Conservation: Mar. Freshw. Ecosyst.* **9**: 391–400 (1999) [http://www.unice.fr/LEML/Pages/Pub\\_LEML/Francour%20et%20al%201999.pdf](http://www.unice.fr/LEML/Pages/Pub_LEML/Francour%20et%20al%201999.pdf)

<sup>30</sup> Belsher T. Houlgatte E., Boudouresque C.F. (2005) Cartographie de la prairie à Posidonia oce-a-ni-ca et des principaux faciès sédimentaires marins du Parc national de Port-Cros (Var, France, Méditerranée). *Sci. Rep. Port-Cros natl Park*, 21 : 19-28 + 1 carte h.t. Available at: [http://www.com.univ-mrs.fr/~boudouresque/Publications\\_pdf/Belsher\\_et\\_al\\_2005\\_Cartographie\\_Port\\_Cros\\_SRPCNP.pdf](http://www.com.univ-mrs.fr/~boudouresque/Publications_pdf/Belsher_et_al_2005_Cartographie_Port_Cros_SRPCNP.pdf)

<sup>31</sup> Ganteaume A., Bonhomme P., Emery E., Hervé G., Boudouresque C.F., (2005) Impact sur la prairie à Posidonia oceanica de l'amarrage des bateaux de croisière, au large du port de Porquerolles (Provence, France, Méditerranée). *Sci. Rep. Port-Cros natl Park*, 21 : 163-173 (pdf). [http://www.com.univ-mrs.fr/~boudouresque/Publications\\_pdf/Ganteaume\\_et\\_al\\_2005\\_Bateaux\\_croisiere\\_SRPCNP.pdf](http://www.com.univ-mrs.fr/~boudouresque/Publications_pdf/Ganteaume_et_al_2005_Bateaux_croisiere_SRPCNP.pdf)

<sup>32</sup> RAMOGE 2000. Espaces remarquables d'intérêt écologique dans la zone RAMOGE. GIS Posidonie & Ramoge Publ. : 1-58.

In **Cataluña**, a 2007 study, conducted by the University of Barcelona, concluded there have been significant losses of posidonia habitat along the Catalan coast during the past 25 years (20-25% area loss). The study also highlighted that around half of the meadows for which data is available are not in good state, showing actual loss in range (area coverage) and signs of degradation, such as low density of sheaves. Although, according to the study, trends seem to be stabilising in recent years, the research team states that the situation “is far from satisfactory, and efforts should be undertaken to improve seagrass quality, health and coverage”. Posidonia meadows are in particular impacted by intense and ever-increasing land use in coastal areas, such as underwater works, moorings etc.

In **Alicante**, a 2002 study concluded that 20% of posidonia habitats studied in the area between Cabo de San Antonio and the Southern limit of the province were affected by trawl fishing, especially in the areas close to Santa Pola y La Vila.<sup>33</sup>

The planned extension of the **Port of Ibiza** (2<sup>nd</sup> development phase), in the **Balearic Islands**, has recently obtained the approval for a new passenger and commercial terminal in “Es Botafoch” by ‘*La Secretaría de Estado de Cambio Climático*’. The environmental impact statement concluded in favour of the project,<sup>34</sup> despite the fact that the environmental impact assessment indicated a number of negative impacts on posidonia meadows, particularly in the east of the project area.<sup>35</sup> While western parts of the posidonia meadow are currently considered to still be in a good condition, meadows situated east of the bay are reported to have been severely damaged during an early phase of the construction project. The statement on the environmental impact assessment argues that the project would mainly impact on posidonia meadows that have already been affected by previous construction projects.<sup>36</sup> We consider this a concern in itself, as **successive projects would allow for the progressive deterioration of posidonia meadows to an extent that would not have been acceptable had all developments been assessed in their entirety at the very start.**

A further concern is the proximity of the port extension to adjacent areas with intact posidonia meadows, such as in the bay of Talamana and within the large Natura 2000 area “**Natural Park Ses Salines d'Eivissa i Formentera**” (ES0000084), which, amongst others has been designated

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<sup>33</sup> J.L. Sánchez Lizaso, J.T. Bayle, J.M. González, A.A. Ramos Esplá, S. Rodríguez Ruiz, P. Sánchez Jerez & C. Valle, 2002. Anexo 13. Impacto de la pesca de arrastre sobre las praderas de Posidonia oceanica. Séptima reunión del Foro Científico sobre la pesca española en el Mediterráneo. Alicante, 6-8 de febrero de 2002. AND Ecologistas en Acción, 2008. Banderas Negras 2008. hipoteca costera. July 2008.

[http://www.ecologistasenaccion.org/IMG/pdf\\_Informe\\_banderas\\_negras\\_2008.pdf](http://www.ecologistasenaccion.org/IMG/pdf_Informe_banderas_negras_2008.pdf)

<sup>34</sup> Ministerio de Medio Ambiente, y Medio Rural y Marino - Secretaría de Estado de Cambio Climático, 2008. Resolución de la Secretaría de Estado de Cambio Climático, por la que se formula declaración de impacto ambiental del proyecto explanada y muelles comerciales al abrigo del muelle de Botafoch en el puerto de Eivissa. Madrid, 17 de junio de 2008. SGEA/IAL Ref.: 20040590PUC . Available via: [http://media.epi.es/www.diariodeibiza.es/media/documentos/2010-12-31\\_DOC\\_2008-07-10\\_13\\_52\\_54\\_res\\_puerto2.pdf](http://media.epi.es/www.diariodeibiza.es/media/documentos/2010-12-31_DOC_2008-07-10_13_52_54_res_puerto2.pdf) AND B.O.E., 2008. 14515 RESOLUCIÓN de 17 de junio de 2008, de la Secretaría de Estado de Cambio Climático. 02 Martes 2008. B.O.E. núm. 212 Available via: <http://www.boe.es/boe/dias/2008/09/02/pdfs/A35792-35796.pdf>

<sup>35</sup> The Ibiza port project is part of a bigger construction scheme, approved in 1994. Botafoch dike and a new access to the port have been already developed. The environmental impact assessment for the Botafoch terminal was first submitted in 2004. It was published in 2007, after a period of consultation and assessment. Since then the construction project has been the focus of an active local debate, with different associations, such as the environmental association Gen/Gob-Eivissa and Amics de la Terra, protesting against the impact on Posidonia oceanica and against the plans for posidonia transplantation. The Balearic Environmental Commission and the other protest groups also voiced concerns about the possible expansion of *Caulerpa racemosa* as a result of the project. The species is a competitor and has vastly increased its presence since the previous phases of the Ibiza harbour development. Environmental associations have argued that a different, smaller port development project, which would have less impacts. The statement on the EIA was published in the B.O.E. (Official Spanish Bulletin) in September 2008, and constructions is thought to start in April 2009 and should be completed within three year. The project has been justified by “the need of new structures to support growing harbour activities linked to increasing tourism and population”, and “the impossibility of operating within sufficient safety conditions due to the proximity to the urban area”.

<sup>36</sup> The environmental impact study of the 2<sup>nd</sup> phase of the project states that “the meadows placed east to the bay have experienced progressive deterioration due to changed environmental factors produced by previous construction works”.

to ensure the protection of posidonia.<sup>37, 38</sup> These areas may be damaged as a result of increased sedimentation and water turbidity. In particular, as the project include plans to deposit dredged mud from an area of 8.5 hectares of the construction site near by or inside the Natural Park of Ses Salines d'Eivissa I Formentera.<sup>39</sup> This will/would result in the transfer of contaminated sediment, which contain the invasive algae *Caulerpa racemosa*, posing a direct threat to posidoina, and heavy metals, such as mercury, according to the environmental impact statement from the Balearic Government.<sup>40</sup>

In addition, the Spanish NGO Ecologistas en Acciòn has reported cases of posidonia destruction and bad management in the Natura 2000 site itself (ES0000084), in particular as a result of uncontrolled boating and anchoring on seagrass beds.<sup>41,42</sup> The site is still missing an adequate management plan.

A further project that will impact on posidonia is the expansion of the marina of Port Adriano (Calvià) in **Mallorca**. The marina is located just 2 km southeast of the Natura 2000 site "**Cap de Cala Figuera**" (ES0000074), which has been nominated due to its well-preserved posidonia meadows and comprises two fisheries reserves. The expansion will increase the port area by 125%, and will affect an area of around 25,000 square meters of posidonia seagrass.<sup>43, 44</sup> In 2008, the Grupo Ornitológico Balear (GOB) reported the direct destruction of 2 hectares of posidonia and up to 5 hectares due to increased turbidity.<sup>45</sup> 30% of the port construction is situated directly within the posidonia meadow.<sup>46</sup>

Also in **Mallorca**, the marina/port of S´Estanyol (Llucmajor) is likely to be extended to cover an area five times the current extent of the port. The extension is thought to result in the destruction of 45,000 m<sup>2</sup> of posidonia seagrass in the Natura 2000 site "**Arxipèlag de Cabrera**" (ES0000083), as well as the marine reserve "Mitjorn".<sup>47</sup>

Posidonia oceanica forms extensive meadows in the site (ES0000083). In addition to the expected damage as a result of the above construction, a recent study of the area has shown that the posidonia meadows have declined during at least the past 6 years.<sup>48</sup> Rates of decline have been greatest near the resort of Es Port, as a result of commutative impacts from tourism.

A 244 meters long electric cable (237m under water) will link **Mallorca Island** with the peninsula. The cable and the construction of a substation will impact the seabed and damage one of the densest and best conserved posidonia meadows among the islands. The project does not consider any alternative plans.

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<sup>37</sup> Ministerio de Medio Ambiente, y Medio Rural y Marino - Secretaría de Estado de Cambio Climático, 2008. *Op. Cit.*

<sup>38</sup> Ecologistas en Acciòn, 2008. Banderas Negras 2008. hipoteca costera. July 2008.

[http://www.ecologistasenaccion.org/IMG/pdf\\_Informe\\_banderas\\_negras\\_2008.pdf](http://www.ecologistasenaccion.org/IMG/pdf_Informe_banderas_negras_2008.pdf)

<sup>39</sup> GEN-GOB Eivissa (2008). Informe de contaminación de costas.

<sup>40</sup> Acta del Comité Técnico de Evaluaciones de Impacto Ambiental del Gobierno Balear, de fecha 20 de diciembre de 2007.

<sup>41</sup> El diputado por Formentera pide que se potencie el parque natural de ses Salines. Última Hora Digital Ibiza. Miércoles 3 de septiembre de 2008. Edición N° 3434 <http://www.ultimahora.es/ibiza/segunda-ib.dba?3537+1007+446128>

<sup>42</sup> Ecologistas en Acciòn, 2007. INFORME DE BANDERAS NEGRAS EN IBIZA, 2007. Available via:

[http://www.ecologistasenaccion.org/IMG/pdf\\_informe\\_banderas\\_negras\\_2007\\_ibiza.pdf](http://www.ecologistasenaccion.org/IMG/pdf_informe_banderas_negras_2007_ibiza.pdf)

<sup>43</sup> Ecologistas en Acciòn, 2008. Banderas Negras 2008. hipoteca costera. July 2008.

[http://www.ecologistasenaccion.org/IMG/pdf\\_Informe\\_banderas\\_negras\\_2008.pdf](http://www.ecologistasenaccion.org/IMG/pdf_Informe_banderas_negras_2008.pdf)

<sup>44</sup> Greenpeace, 2008. Destruction at all coast 2008. Report on the Spanish coast situation. July 2008.

<sup>45</sup> Ecologistas en Acciòn <http://www.ecologistasenaccion.org/spip.php?article12699>

<sup>46</sup> Greenpeace, 2008. Destruction at all coast 2008. Report on the Spanish coast situation. July 2008.

<sup>47</sup> Ecologistas en Acciòn, 2008. Banderas Negras 2008. hipoteca costera. July 2008.

[http://www.ecologistasenaccion.org/IMG/pdf\\_Informe\\_banderas\\_negras\\_2008.pdf](http://www.ecologistasenaccion.org/IMG/pdf_Informe_banderas_negras_2008.pdf)

<sup>48</sup> N Marbà, C.M. Duarte, S. Agustí, M. Ll. Calleja, E. Díaz-almela, R. Santiago, R. Martínez, 2006. Regresión de praderas de Posidonia oceanica y calidad ambiental en el Parque Nacional del Archipiélago de Cabrera. : causas y magnitud. Jornadas Organismo Autónomo Parques Nacionales, Madrid. Parques Nacionales. Ministerio de Medio Ambiente 55/2002. (2003- 2006).

In **Menorca**, posidonia in the Natura 2000 site “**Natural Park S'Albufera des Grau**”, designated amongst others for the protection of posidonia, is reported to be under threat from increased and uncontrolled pleasure boating and anchoring.<sup>49</sup> There are currently no specific management measure in place to control moorings and protect the posidonia meadows. In 2000, a LIFE project made a start by placing 37 buoys in particularly sensitive areas, but these are not considered a sufficient number.

A significant expanse of posidonia habitat in the Natura 2000 site “**Serra Gelada i Litoral de la Marina Baixa**” (**ES5213021**), at the coast of Alicante, has been and is being damaged by construction works to expand the marina Luis Campomanes and the port/marina of Altea. In the case of Luis Campomanes (and possibly Altea), the project plans had acknowledged that damage to posidonia would occur, and transplantation was considered as a compensatory measure. Planning permission was granted in 2003, posidonia was transplanted and construction works began shortly after. Seven months after the transplanting of posidonia, a survey found that only 15% of the shoot survived within the transplanted area. Essentially, transplantation had failed (Sánchez-Lizaso et al. 2007).<sup>50</sup> In 2005, research from the University of Alicante found that the development of both ports has caused the destruction of at least 11 hectares of posidonia habitat, and the degradation of a further 14 hectares. The analysis estimated that further expansion of both ports would destroy an additional 64 hectares and damage a further 18 hectares of posidonia habitat.<sup>51</sup> In reaction to the study, construction and transplantation works were stopped as a precautionary measure in November 2006. At the end of 2007, the local government rejected an appeal of the construction company, which wanted to continue the works. The decision stated that transplantation had failed and that the company had violated its duties under the Environmental Impact Statement. On the base of this decision, environmental groups have since demanded that the project should be discontinued.<sup>52</sup>

Further south, on boundary of the same Natura 2000 site, posidonia habitats have also been damaged as a result of a beach regeneration project that has placed between 300 and 500 cubic meters of sand in **Cala del Tio Ximo, Benidorm**.<sup>53</sup>

In the Natura 2000 site “**Cabo Roig**” (**ES5213033**), also on the coast of Alicante, the development/expansion of two coastal projects – in Cala de la Mosca (Orihuela) and in Punta Prima (Torrevieja) – are thought to result in the destruction of local posidonia meadows. A further programme, known as “Acondicionamiento de la costa, restauración paisajística y mejora ambiental del entorno de Punta Prima”, intends to artificially establish new beaches and a marina within the Natura 2000 site. To date, this stretch of coastline remains relatively un-developed and it still contains a very well preserved posidonia meadow with a cover of 87,5%.<sup>54</sup> The project in Cala de la Mosca lacks an environmental impact study.

Along the coast of **Murcia**, in Puerto Casica Verde, Águilas, a new port has recently been completed and a further expansion has already been approved. It is thought that the project will damage or destroy more than 15ha inside the Natura 2000 site “**Franja Litoral Sumergida de la Region de Murcia**” (**ES6200029**) of posidonia meadows because of direct impacts and a

<sup>49</sup> Ultima Hora Digital Menorca Jueves 21 de agosto de 2008 Edición N° 3122. La dirección del parque S'Albufera des Grau insta a poner coto al fondeo incontrolado <http://www.ultimahora.es/menorca/segunda-me.dba?3524+2013+444839>

<sup>50</sup> EC, 2008. MANAGEMENT of Natura 2000 habitats \* Posidonia beds (Posidonion oceanicae) 1120 Technical report 2008 01/24 Available via:

[http://ec.europa.eu/environment/nature/natura2000/management/habitats/pdf/1120\\_Posidonia\\_beds.pdf](http://ec.europa.eu/environment/nature/natura2000/management/habitats/pdf/1120_Posidonia_beds.pdf)

<sup>51</sup> FERNÁNDEZ-TORQUEMADA, Y.; GONZÁLEZ-CORREA, J.M.; MARTÍNEZ, J.E. and SÁNCHEZLIZASO, J.L., 2005. Evaluation of the effects produced by the construction and expansion of marinas on Posidonia oceanica (L.) Delile meadows. Journal of Coastal Research, SI 49 (Proceedings of the 2nd Meeting in Marine Sciences), 94 – 99. Valencia — Spain, ISSN 0749-0208

<sup>52</sup> Greenpeace, 2008. Destruction at all coast 2008. Report on the Spanish coast situation. July 2008.

<sup>53</sup> Ecologistas en Acción, 2008. Banderas Negras 2008. hipoteca costera. July 2008.

[http://www.ecologistasenaccion.org/IMG/pdf\\_Informe\\_banderas\\_negras\\_2008.pdf](http://www.ecologistasenaccion.org/IMG/pdf_Informe_banderas_negras_2008.pdf)

<sup>54</sup> Greenpeace (2009). Destruction at all Co[aj]sts Report (On Press).

deterioration in water quality. The Environmental Impact Assessment recognised the special ecological importance of this area, and in particular its posidonia meadows. The assessment also stated that the area is already affected by tourism and trawl fishing.

### ***Impacts from desalination plants***

The construction and operation of desalination plants have impacted on posidonia meadows in the following sites and areas:

- the desalination plant in Melilla, Aguadú coast, has impacted on Natura 2000 site “Zona Marítimo Terrestre de los Acantilados de Aguadú” (**ES6320001**);
- the desalination plant of Valdelentisco is damaging posidonia meadows in Natura 2000 site “Medio Marino de la Region de Murcia” (**ES6200048**) in Mazarrón, Murcia;
- the desalination plant of Mutxamel (Alicante), which has been constructed and is operating despite an unfavourable environmental impact statement by the Institute of Coastal Ecology, is damaging the posidonia meadows along the coast of El Campello (Alicante); and
- the desalination plant of Torrevieja is impacting on posidonia meadows within the Natural Park Lagunas de la Mata, which is also a Natura 2000 site “Cabo Roig” (**ES5213033**). The Commission rejected a complaint against the construction/operation of this plant in 2007.

As regards **Greece**, the most dominant and widespread concern relates to trawl fisheries and the fact that Greece will not sufficiently protect posidonia meadows, so long as they are not adequately mapped. With reference to the Mediterranean Regulation, the Greek Ministry of Agriculture, on the 4<sup>th</sup> of June 2007, issued a national decree prohibiting fishing with trawling gears in the 57 Natura 2000 sites in which posidonia has been mapped. No mention is made of the remaining posidonia areas (whether they lie within or outside Natura 2000 sites), leaving approximately 80-90% of posidonia meadows unprotected. **In addition to violating provisions under the Habitats Directive, this would appear to be a breach of the provisions of Article 4 of the Mediterranean Regulation, which provides for the protection of seagrass beds with the exceptions of specific derogations.**

### ***Impacts from fish farms***

The European Environment Agency report on priority issues in the Mediterranean (Report 4/2006) warns of **evidence that the close proximity of fish farms pose a serious threat to the integrity of posidonia meadows.**<sup>55</sup> They list the following cases:

- |               |  |
|---------------|--|
| <b>Spain</b>  | - <b>Fornells Bay, Minorca, Balearic Isles:</b> sea-grass meadows were severely affected or became totally eliminated as a consequence of fish farming (Delgado <i>et al.</i> , 1999).<br>- <b>Western Mediterranean, SE Spain:</b> 53% of the meadow area had decreased shoot sizes, leaves per shoot and leaf growth rate (Ruiz <i>et al.</i> , 2001). |
| <b>France</b> | - <b>Western Mediterranean, Corsica:</b> meadow shoot density decreased from 466 (reference station) to 108 per m <sup>2</sup> at impacted site (Cancemi <i>et al.</i> , 2003).  |
| <b>Italy</b>  | - <b>Western Mediterranean, Sardinia:</b> Disappearance of the sea-grasses underneath the cages (Pergent <i>et al.</i> , 1999).  |

The same report also lists evidence of damage to seagrass meadows from fish farms in Malta (Dimech *et al.*, 2002) and Croatia (Katavic and Antolic, 1999). Pergent-Martini *et al.* (2006) has

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<sup>55</sup> UNEP/EEA. (2006) State and pressures of the marine and coastal Mediterranean environment. EEA Report n.4. European Environment Agency, Copenhagen.

also published specifically on the impacts of fish-farming on posidonia meadows.<sup>56</sup> The latter recommend:

- i) No fish farming facility should be set up directly above *P. oceanica* and *C. nodosa* meadows.
- ii) If there is a meadow nearby, a minimum distance of 200 m from the cages should be respected. This generally corresponds to the effective area of impact on the benthos (Doglioli et al. 2004). This distance should be increased near the meadow's lower limit (more sensitive to turbidity than shallow-water meadows) and varied in function of currents and the size of the fish farm.
- iii) Generally speaking, facilities should be set up over 45–50 m depth whenever possible.
- iv) An impact study should be carried out for every request to set up a fish farming facility, before implementation.
- v) The authorisation to set up a fish farming facility should be re-examined every 4 years with a view to possible extension, on the condition that the *P. oceanica* meadows situated nearby have not regressed (in terms of size or vitality). This requirement, which involves the setting up of a meadow monitoring system, should lead fish farmers to move as far as possible away from seagrass meadows.

**In conclusion, Greenpeace submits that Spain and, perhaps to a lesser extent, Italy, France and Greece have all failed to comply with Article 6.** The subsequent section further considers the particular practice of transplanting posidonia seagrass in an effort to compensate for damages, in the context of Article 6(4) of the Directive.

**3. Failure to comply with Article 6, and in particular Article 6(4) provisions relating to the carrying out of plans or projects in spite of a negative assessment of the implications for the site, and the application of compensatory measures, which should be applied only after an opinion of the Commission has been delivered**

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**Greenpeace is concerned about the ineffective and often detrimental use of posidonia transplantation techniques in the context of implementing compensatory measures in relation to damage caused by plans and projects, such as coastal construction projects.**

Experts have little or no confidence in the success of posidonia transplantation practices. Boudouresque (2006) and a group of fellow experts in posidonia protection, write:

*“Le concept de mitigation doit toutefois être utilisé avec la plus grande prudence : le risque existe en effet que la mitigation soit utilisée comme un alibi permettant de poursuivre des aménagements destructeurs, en trompant le public et en donnant bonne conscience aux élus. Il doit être en effet bien clair qu’il n’existe pas de compensation réelle à un aménagement ; la destruction d’un herbier à *Posidonia oceanica*, par recouvrement sous un ouvrage, est irréversible, car c’est le biotope qui a été détruit définitivement. La mitigation doit donc être considérée uniquement comme une tentative de restauration approximative de ce qui a été détruit dans le passé, et non comme la justification de nouvelles destructions par d’hypothétiques compensations (Boudouresque, 2000) “.*<sup>57</sup>

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<sup>56</sup> Pergent-Martini C., Boudouresque C.F., Pasqualini V., Pergent G., 2006 Impact of fish farming facilities on Posidonia oceanica meadows: a review. Marine Ecology. 27 : 310-319 (pdf). Available via: [http://www.com.univ-mrs.fr/~boudouresque/Publications\\_pdf/Pergent\\_Martini\\_et\\_al\\_2006\\_Marine\\_Ecology.pdf](http://www.com.univ-mrs.fr/~boudouresque/Publications_pdf/Pergent_Martini_et_al_2006_Marine_Ecology.pdf)

<sup>57</sup> Boudouresque C.F., Bernard G., Bonhomme P., Charbonnel E., Diviacco G., Meinesz A., Pergent G., Pergent-Martini C., Ruitton S., Tunesi L. (2006) Préservation et conservation des herbiers à Posidonia oceanica. RAMOGE pub. 1-202.

[rough translation: The concept of compensation/transplantation must be used with great caution: there is the risk in fact that compensatory measure be used as an excuse to allow destructive developments to go ahead, misleading the public and giving the elected administrators a clear conscience. It must be made quite clear that there is no real compensation for the destruction of a *Posidonia oceanica* meadow caused by construction projects, the loss of the biotope is irreversible. Consequently, any replanting should only be considered as an attempt to restore an area of seagrass previously destroyed, rather than as compensatory measures and hence justification for further destruction.]

Boudouresque *et al.* further point out that the transplantation of posidonia can be justified as a measure for restoration of previously destroyed posidonia meadows (that is from a place to one where there had already been some posidonia), but only if those factors responsible for the destruction/reduction of the meadow have been eliminated, and the expected growth of the transplanted plants is likely to be much higher than that of the locally surviving posidonia.

Some of the longest-lasting posidonia transplantation projects/trials have been carried out by the G. Cooper Association in France. In an effort to reintroduce posidonia in a once populated area, the Association transplanted 70,000 sheaves of posidonia between 1972 and 1981 in an area of 70 m<sup>2</sup> (Cooper, 1981). In the majority of cases, the posidonia died after just a few months as a result of impacts from storms, smothering by sand, infections or other, often unknown, reasons. In some cases, a survival rate of up to 6 years was achieved, but with a highly variable mortality rate that ranged from 50% to 99%. Of the surviving sheaves, only a fraction rooted and branch out.

Researchers at the University of Nice developed a more rigorous scientific approach to testing the success rate of posidonia transplantation trials. All trials were small scale (between 200 and 1,000 sheaves transplanted in each case) and the survival of the different transplants was extremely variable (from 0 to 96%). The time of year in which the posidonia was transplanted, was a significant factor that determined the success rate of the trials. Low success rates were also described by Molenaar *et al.* (1992).<sup>58</sup>

Considering the above, it is not surprising perhaps that the European Commission's technical guidance also summarises the situation as follows: "most [transplantation projects] have failed due to the slow growth rate of the species and the lack of knowledge. Even if successful, transplant restoration of *P. oceanica* has to be considered over a long time frame, requiring active recurrent management over several decades". **The technical note therefore concludes that "the restoration of *P. oceanica* meadows cannot be considered as a measure, justifying the destruction of existing meadows".<sup>59</sup> In other words, it should not be considered as a compensatory measure for the destruction of meadows as a results of plans and projects.**

More importantly still, Article 6(4) of the Habitats Directive limits the situations in which an authority may exceptionally grant authorisation for the go-ahead of a plan or project with known negative impacts on a site hosting a priority habitat, such as posidonia meadows, to cases where one or more of the following considerations prevail:

- consideration relating to human health or public safety;
- beneficial consequences of primary importance for the environment; or
- other imperative reasons of overriding public interest, further to an opinion from the European Commission.

Coastal construction projects such as port developments, the construction of marinas and other anchorage facilities, fish-farms and coastal defence systems would not appear to fall into category one or two of this list. Under certain circumstances, they may be considered to fall into category

<sup>58</sup> Heike Molenaar, Alexandre Meinesz (1992) Vegetative Reproduction in *Posidonia oceanica*. II. Effects of Depth Changes on Transplanted Orthotopic Shoots Marine Ecology 13 (2) , 175–185

<sup>59</sup> Díaz-Almela E. & Duarte C.M. 2008. Management of Natura 2000 habitats. 1120 \**Posidonia* beds (*Posidonion oceanicae*). European Commission



three. However, invoking imperative reasons of overriding public interest is conditional upon receiving a prior opinion from the European Commission. **Yet, to date and judging by the information presented on its web pages, the European Commission has seemingly not been asked and certainly has not delivered any opinions in relation to the projects and sites mentioned above, nor has the Commission provided an opinion specifically in relation to the transplantation of posidonia meadows.**<sup>60</sup> This is in spite of the fact that Italy and Spain, and possibly also Greece and France, have authorised several coastal construction projects which damaged or are damaging seagrass meadows, and, in such cases, have promoted the transplantation of seagrass meadows to new location.

In fact, in Spain, the concept of “compensating” for the destruction of posidonia by transplanting the meadow elsewhere is promoted by some local authorities, mainly the Regional Government of Valencia and the Regional Government of the Canary Islands, albeit the latter is not placed in the area not affected by this complaint (namely the Macaronesian region).

The proposed transplantation of some 300,000 m<sup>2</sup> of posidonia meadow as a result of a building project related to a recreational port in Altea (Luis Campomanes), in the Natura 2000 site “**Serra Gelada i Litoral de la Marina Baixa**” (ES5213021), at the coast of Alicante, has recently been criticised by WWF/Adena and experts from the University of Alicante, who have pointed to uncertainties in the survival of the posidonia. Apart from many technical questions on graft survival, both raised the concern that under the proposed conditions it would take 1,800 years to recover the equivalent of grass surface at a financial cost of around 100 million Euro. This specific project is currently on hold, pending authorisation from the Regional Government. A sentence of the Supreme Court of the Autonomous Region of Valencia (Case number 1558, December 2007), recently considered that the transplantations already performed are a failure. The Court decision further criticised that transplantations were based on experience with a different species of seagrass, *Posidonia australiana*.

The Italian Ministry for the Environment frequently requires the transplanting of posidonia as a condition for authorising coastal construction projects, which impact on seagrass meadows. This has been the case, for instance, during the enlargement of **Civitavecchia harbour** and subsequent authorisation of the ENEL coal power plant (Torre Valdaliga), which impacted on Natura 2000 site “**Fondali tra Punta S. Agostino e Punta della Mattonara**” (IT6000005).<sup>61</sup> The construction project was approved in 2002 and 2003, by Decrees VIA (Valutazione Impatto Ambientale) no. 6923 of January 28, 2002, and no. 680 of November 4, 2003, respectively. Neither case appears to have been referred to the European Commission for an opinion.

As a result of the authorisation of the construction projects in and near Civitavecchia harbour, some 320,000 seedlings of posidonia were transplanted to two distinct patches covering a total area of 10,000 square meters. The transplantation took place in August 2004 and February 2005, with seedlings planted at a depth of 7 to 13 meters. Plants were planted at a density of 32 plants per square meter, although the average density of naturally occurring posidonia meadows in the same region is 350 plants per square meter. It is thought that the total cost of the transplantation was four and five million Euros.

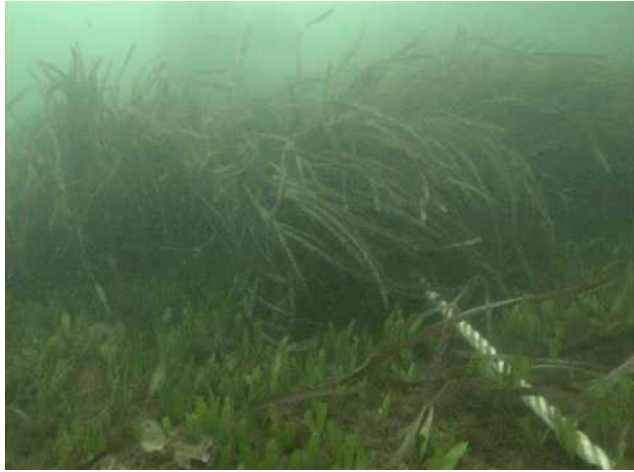
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<sup>60</sup> The only opinions delivered in relation to coastal/marine projects are those in relation to the development of the new port in Granadilla and the extension of the port of Rotterdam

<sup>61</sup> For map see

[http://www2.minambiente.it/Sito/settori\\_azione/scn/rete\\_natura2000/elenco\\_cartografie/sic/mappe/IT6000005.jpg](http://www2.minambiente.it/Sito/settori_azione/scn/rete_natura2000/elenco_cartografie/sic/mappe/IT6000005.jpg)

The plants were anchored to the bottom by means of a wire mesh and a frame of reinforced concrete (a "tile" of ca. 40 x 40 cm). A series of violent storm surges (particularly in February 2005) destroyed many of the tiles while the transplanting operation was still ongoing. The operators of the project reported that they removed all tiles that were destroyed.



Pictures: Posidonia roots under a thick mud layer show the destruction of a once healthy posidonia meadow.

During a survey of the area in August 2007, Greenpeace staff found a significant number of tiles that were empty (i.e. without sheaves) or only contained a small number of sheaves. In addition the water was turbid and siltation of the ground widespread. This suggests a high failure rate, and certainly a greater failure rate than the 60% survival rate reported by the project team. Damage was visible at all depth levels, including the maximum depth of 10-13 m. Greenpeace can thus not confirm the high rate of survival that the project description claimed.

Recently, a further transplantation operation has been authorised. Greenpeace considers that this is likely to lead to the same detrimental affects on the local posidonia meadows: first up-rooting, then transplantation and then death of the posidonia plants.

In **France**, a number of transplantation schemes have taken place to “compensate” for damage that was incurred as a result of building projects, for example in Marseille, Toulon, Hyères, Port-Cros, Cannes, Golfe-Juan, Nice, and Villefranche-sur-Mer. At Cannes, posidonia was transplanted within a meadow of, *Cymodocea nodosa*, another nationally protected seagrass species, with the consequence that both species declined. However, responding to mounting evidence that posidonia transplantation generally does not produce the intended results, the French Ministry for the Environment has since prohibited the use of transplantation of posidonia as a “compensatory” measure. In France, transplantations are now only authorised for scientific research.

**Greenpeace submits that Spain and Italy have failed to comply with Article 6(4) relating to the carrying out of plans or projects in spite of a negative assessment of the implications for the site, and the application of compensatory measures, which should be applied only after an opinion of the Commission has been delivered. Both countries have carried out transplantations, despite recommendations not to use transplantation techniques as a compensatory measure. Moreover, neither country seems to have requested the opinion of the Commission in going forward with the projects. France seems to have responded appropriately to the concerns and scientific evidence by limiting the use of transplantation schemes to scientific uses, yet also seems to have failed with regards to the requirement to seek an opinion from the Commission. We cannot provide sufficient evidence for Greece.**

**Find Annex I and II in separate documents.**