

Strasbourg, 20 October 2011  
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**T-PVS/Files (2011) 20**

CONVENTION ON THE CONSERVATION OF EUROPEAN WILDLIFE  
AND NATURAL HABITATS

**Standing Committee**

31<sup>st</sup> meeting  
Strasbourg, 29 November – 2 December 2011

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**Specific Site - File open**

**Conservation of the Akamas and Limni areas in  
Western Cyprus**

**REPORT BY THE GOVERNMENT**

*Document prepared by:  
the Ministry of Agriculture, Natural Resources and Environment of Cyprus*



REPUBLIC OF CYPRUS  
MINISTRY OF AGRICULTURE, NATURAL  
RESOURCES AND ENVIRONMENT



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20<sup>th</sup> October, 2011

### **File Open under the Bern Convention – Akamas Peninsula (Cyprus)**

Regarding the above subject and your letter dated 3.10.2011, I would like to underline Cyprus' commitment to provide the Secretariat with all available requested information and emphasize our determination to continue working towards our common goal of nature conservation.

As was stated in our previous letter dated 2.8.2011, part of the Akamas Peninsula has been proposed for inclusion in the Natura 2000 Network as a Site of Community Importance (SCI), under the Habitats Directive (92/43/EEC) and has been designated as a Special Protection Area (SPA), under the Birds Directive (79/409/EEC). Additionally, the Government of Cyprus has designated a wider area, around the pSCI and SPA, which will be managed via development regulations and restrictions, to ensure the highest possible protection of the peninsula.

However the above mentioned regulations and restrictions as well as the Management Plan for the pSCI are not yet available. Nevertheless, we can provide the Secretariat with the Town Planning Zones and restrictions that are currently available only in Greek. An English version is not available.

Please be informed that additional time is required to enable us to send you any further information.

Despo Zavrou, for Director



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2<sup>nd</sup> August, 2011

### **File Open under the Bern Convention – Akamas Peninsula (Cyprus)**

In regards with the above subject and your letter dated 6.5.2011, please find attached a translation of the Executive Summary of the Management Plan for the Limni Area, officially known as the Natura 2000 site of “Polis-Gialia – CY4000001”.

Please note that this site is not part of the proposed “Chersonisos Akama – CY4000010” Natura 2000 site.

As was stated in our Report sent to you on the 30<sup>th</sup> of June, 2010, part of the Akamas Peninsula has been proposed for inclusion in the Natura 2000 Network as a Site of Community Importance (SCI), under the Habitats Directive (92/43/EEC) and has been designated as a Special Protection Area (SPA), under the Birds Directive (79/409/EEC). We are waiting for the Commission Decision for the official inclusion of the proposed SCI in the Network.

Additionally, the Government of Cyprus, has designated a wider area, around the pSCI and SPA, that will be managed via development regulations and restrictions, to ensure the highest possible protection of the peninsula.

Despo Zavrou, for Director

## EXECUTIVE SUMMARY OF THE DRAFT MANAGEMENT PLAN FOR THE NATURA 2000 NETWORK “POLIS GIALIA” SITE

### 1. PRECISE DESCRIPTION OF PROTECTION ZONE BOUNDARIES (BOUNDARIES – COORDINATES)

Within the framework of the Management Plan, it has been proposed to establish four protection zones. One of these zones covers the terrestrial area and the remaining three cover the marine area. Therefore, the boundaries of the High Protection Zone for the beach and the sand dune ecosystems YII will be set within the terrestrial part of the protected area, whilst those of the Marine Protection Zones Θ1, Θ2 and Θ3 will be set in the marine area.

The protection zones which are proposed in the terrestrial and marine environment are described in more detail herein below:

#### *Terrestrial protection zones*

The proposed terrestrial protection zones are the following:

- High Protection Zone covering the beach and the sand dune ecosystems (YII). It is defined between the coastline and the external terrestrial boundary of the Natura 2000 Network site, which is the same as the ecological protection coastal zone boundary of the Policy Statement for Polis Chrysochous and follows the protection boundary of the beach of the Makounta, Argaka and Gialia communities. The total area of this zone is 976 da. The aim of the proposed measures in this zone is to protect and manage the nesting beach of the *Caretta caretta* sea turtle, the sand dune ecosystems and the endemic species of flora.

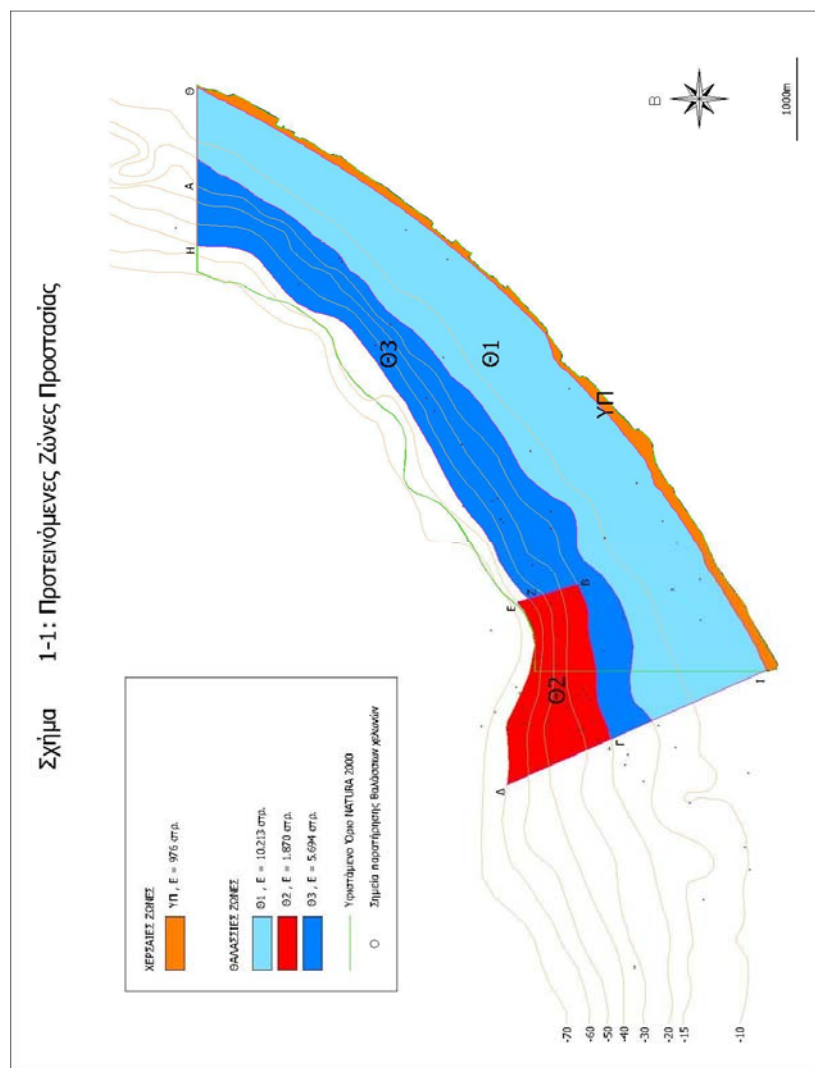
#### *Marine protection zones*

The proposed marine protection zones are the following:

- High Protection Marine Zone (Θ1). In this zone, all forms of fishing activity, navigation, marine entertainment, mooring and vessel and small boat traffic will not be permitted during the period from May 15 to September 30. The main aim is to protect the *Caretta caretta* sea turtle. The southern boundary of the zone is the coastline and the northern boundary is the 15m isobaths. More specifically, this zone, which covers an area of 10213 da, is defined by the coastline, the 15m isobaths and the straight sections which are defined by points I, K, and Θ, A. The coordinates of these points are presented below in the WGS84, UTM geographical system. These points are:
  - K (X,Y)= (447.172,58 , 3.879.523,76)
  - A (X,Y)= (453.952,30 , 3.884.992,55)
  - Θ (X,Y)= (454.813,64 , 3.884.992,58)
  - I (X,Y)= (447.778,21 , 3.878.148,54)
- High Protection Marine Zone (Θ2). This zone will primarily aim to protect the green turtle and all forms of fishing activity as well as boat traffic will not be permitted throughout the year. The objective of the measures is to protect the green sea turtles. This zone includes the area with the largest density of green turtles found during the summer period of 2007. The zone extends beyond and outside the boundaries of the Network site. The 20m isobaths and the 60m isobaths are proposed as the southern and northern boundary respectively. This zone, which covers an area of 1870 da, is defined between the 20m isobaths, the 60m isobaths and the straight sections which are defined between the points Γ, Δ and B, E. The coordinates of these points are presented below (WGS84, UTM):
  - Δ (X,Y)= (446.405,99 , 3.881.264,48)
  - E (X,Y)= (448.601,46 , 3.881.144,89)

- B (X,Y)= (448.821,11 , 3.880.418,03)
- Γ (X,Y)= (446.956,55 , 3.880.014,30)
- Marine Protection Zone (Θ3). The Fishing Law is proposed to apply in this zone (i.e. to allow both professional and amateur fishing) but with certain restrictions regarding the time during which nets may remain in the sea. The aim of these measures is to protect the posidonia sea meadows and reduce, as much as possible, the mortality of sea turtles due to fishing activities. The southern boundary of this zone is the 15m isobaths and the northern boundary is the 50m isobaths with the exception of the Θ2 zone, where the 20m isobaths is defined. This zone, which covers an area of 5694 da is defined by the following points:
  - Z (X,Y)= (448.643,96 , 3.881.004,23)
  - H (X,Y)= (452.913,76 , 3.884.992,55)
  - A, (X,Y)= (453.952,30 , 3.884.992,55)
  - K (X,Y)= (447.172,58 , 3.879.523,76)
  - Γ (X,Y)= (446.956,55 , 3.880.014,30)
  - B (X,Y)= (448.821,11 , 3.880.418,03)

Figure 1-1 depicts the protection zones both in the terrestrial and the marine environment of the site under protection.



## **2. ACTIVITIES PERMITTED, PERMITTED UNDER CONDITIONS AND PROHIBITED PER ZONE**

### ***2.1. Proposed measures – Documentation***

This paragraph provides a detailed description of the measures which have been proposed for every zone both in the marine and the terrestrial environment.

#### ***Terrestrial environment***

The following must apply in the proposed terrestrial zone in the study area:

- The planting of indigenous plants to protect the nesting beach from light pollution is permitted, in an attempt not to alter the esthetic nature and the ecosystem functions of the area.
- Maintenance works to the central pipeline of the Chrysochous Irrigation Scheme and to the existing infrastructure networks which cross the area are permitted. These works must be carried out with due care and under the supervision of the competent body so as to ensure the least possible intervention to the sand dunes and the surrounding area.
- The planting of foreign species in all facilities which are adjacent to the sand dune ecosystems is not permitted. The planting of indigenous species of flora results in the restoration, to the extent possible, of the local natural environment and does not carry the risk of introducing foreign competitive plant species.
- Hunting within the YII zone is not permitted.
- Grazing within the YII zone is not permitted.
- Sources of light within the YII zone which have a negative impact on the egg-laying of sea turtles must be replaced. The new sources of light must comply with the lighting specifications provided in the Management Plan for the “Polis-Gialia” site.

#### ***High Protection Zone (YII)***

The following measures are proposed to apply in the High Protection Zone covering the beach and the sand dune ecosystems (YII):

- Works aiming to protect, manage and promote the environment are permitted following the issue of relevant permits by the Management Body and the other competent services.
- The mechanical cleaning of the sandy beach is not permitted throughout the year.
- The clearing of ammophilous vegetation, the disposal of debris, the opening of roads and the picking of plants in the area of the sand dune ecosystems are not permitted.
- Scientific research and the systematic monitoring of the ecological parameters should continue upon obtaining a permit from the competent body.
- Camping, overnight stay and the lighting of fire on the sandy beach and the sand dune ecosystems are not permitted throughout the year. From May until October, people are not allowed to remain on the site one hour before sunset up to one hour after sunrise (such stay may exceptionally be permitted for the purpose of scientific monitoring and research upon the issue of a relevant permit by the Management Body).
- Amateur fishing from the beach is permitted (with a rod or a handline) one hour after sunrise until one hour before sunset, for the period between May and October. For the rest of the year (November – April), amateur fishing is permitted throughout the day. A potential increase in the number of fishermen could possibly lead to a future restriction or prohibition of amateur fishing from the beach.
- The placement of umbrellas and sunbeds in areas of the community beaches where sea turtles do not lay their eggs is permitted, on condition that they are removed from the beach one hour before sunset until one hour after sunrise. The issue of a relevant permit from the Management Body of the protected area is required for the placement of such umbrellas – sunbeds. The permit will indicate their minimum and maximum distance from the coastline, the maximum number of

umbrellas – sunbeds and the way they are to be removed one hour before sunset until one hour after sunrise. Two community beaches are proposed to be created within the YII zone (community beaches for the communities of Argaka and Gialia) following the elaboration of a proper study of the relevant needs.

- It is recommended to set the external boundaries of the sand dune ecosystems as well as to construct transverse, preferably elevated, wooden corridors or pathways in order to protect them.
- Cultivation in the lawfully existing agricultural areas is permitted. Crops should, by priority, be converted into organic crops. The construction of greenhouses and agricultural warehouses is prohibited as these will alter the landscape. Moreover, greenhouses will cause pollution to the area and lead to more intense farming.
- Any privately owned areas which are subject to burdensome restrictions in terms of building construction within the YII zone must be expropriated by the Management Body.
- Construction within the YII zone is not permitted. As regards the issue of construction permits for the plots part of which falls within the YII zone, a ground plan must depict the boundary of the sand dune ecosystems, the boundary of the YII zone and the indicative position of the proposed buildings, as far away as possible from the coastline. It will also include proposals for planting and the appropriate management of lighting with the aim of protecting the egg-laying of sea turtles.
- Facilities causing nuisance may not be established within the YII zone. From May until October and from 22:00 p.m. until 05:00 a.m., the equivalent continuous sound level (Leq) caused by man-made activities must not exceed 55Db, at any spot of the sandy beach.
- The movement of vehicles on the beach and the sand dune ecosystems is not permitted. Vehicle movement within the sandy beach has significant consequences on egg-laying by sea turtles.
- The construction of fences to prevent road access to the beach and the sand dune ecosystems is permitted. These must be placed in all legally existing roads that lead to the sandy beach and the sand dune ecosystems. Existing illegal roads on the sand dune ecosystems must be abolished.
- The regular monitoring of the sea turtle nests by the competent authority, as well as of the factors which affect nesting activity and the nests themselves must continue, in order to ensure adequate protection.
- The placement of cages on all sea turtle nests by the competent body must continue as is the current practice, in order to reduce the risk of eggs and baby turtles being snatched by foxes.
- The construction, within the zone, of up to two small wooden lightweight structures to be used for the purpose of informing visitors and raising awareness is permitted.
- Under the care of the Management Body, it is permitted to construct vertical pathways for controlled access to the sandy beach.
- It is recommended to monitor, in a systematic way, the erosion of the sections of the beach and human disturbance in the vegetation zone of the beach (cleaning of the beach, transgression, development) so as to ensure a systematic monitoring of man-made development activities in the area.

### ***Marine environment (Zones Θ1, Θ2 and Θ3)***

With regard to the proposed Θ1, Θ2 and Θ3 marine zones in the study area, the following measures must apply:

- The construction of breakwaters or other marine structures is not permitted.
- The port and coastal engineering works which are planned outside and near the protected area require an appropriate Environmental Impact Study to document that no significant impact is expected on the biology – ecology of the sea turtles, both in the construction and operation phase.

***High Protection Marine Zone 01***

In the High Protection Marine Zone 01 the following measures will apply from May 15 until September 30:

- The movement, traffic, stay and mooring of all boats and navigation means in general irrespective of their method of propulsion are not permitted.
- Fishing with any form of fishing instrument is not permitted, with the exception of rod fishing from the beach, one hour after sunrise until one hour before sunset.
- Water culture is not permitted.
- Human presence in marine area 01 is not permitted one hour before sunset until one hour before sunrise.
- The use of fishing guns is not permitted.

In the period from October 1 until May 14, the measures which have been proposed for zone 03 will apply.

***High Protection Marine Zone 02***

In the High Protection Marine Zone 02 the following measures must apply throughout the year:

- Fishing with any form of fishing instrument as well as boat traffic are not permitted.
- Water culture is not permitted.
- Human presence in marine area 02 is not permitted one hour before sunset until one hour after sunrise.
- The use of fishing guns is not permitted.

***Marine Protection Zone 03***

It is proposed that the following measures apply throughout the year in the Marine Protection Zone 03:

- The movement of boats and navigation means in general at a speed greater than 6 knots (nautical miles per hour) is not permitted
- Water culture is not permitted.
- Professional and amateur fishing are permitted in accordance with the Fishing Law on condition that fishing with nets will be permitted one (1) hour before sunset until two (2) hours after sunset and two (2) hours before sunrise until three (3) hours after sunrise.

***2.2. Proposed studies, works and activities***

In the context of the Management Plan, it is proposed to elaborate studies for the better protection, management and promotion of the protected area. The following studies are proposed:

- Study relating to the planting and restoration of sand dune ecosystems.
- Study to examine the ecology of the sea turtles in the marine area of Chrysochous Bay.
- Ground topographic mapping study of the external boundaries of the sand dune ecosystems.

The following works are proposed with regard to the management, protection and promotion of the area:

- Construction of wooden fencing on the external boundaries of the sand dune ecosystems. It is proposed that the fences are made of wood, at a height of 1m. It is also proposed that no saw timber is used but rather tree branches of a diameter of 50-80mm.
- Placement of bars on the roads which provide access to the beach and the sand dune ecosystems with the aim of preventing the passing of vehicles.



- Construction of transverse pathways providing access to the beach (preferably elevated ones).
- Creation of a limited number of parking lots in the public areas outside the sandy beach and the sand dune ecosystems within the YII zone.
- Establishment and operation of an environmental awareness centre within the existing facilities of the Gialia Forest Station.
- Construction and operation of two lightweight structures (kiosks) within the YII zone.
- Placement of signs providing information, orientation and interpretation of the environment.
- Planting with the aim of reducing light pollution in the study area. The planting of the following species is proposed with a view to reduce light pollution: *Pistacia lentiscus*, *Juniperus phoenicia*, *Tamarix smyrnensis* καὶ *Tamarix hampeana*. The length of the planting will be 4.50m.

The following activities are proposed in order to protect, manage and promote the protected site:

- Guarding of the protected site. It is proposed that the terrestrial area be guarded by one person throughout the year.
- Operation of information centre. The employment of at least one person on a full-time basis is required. In the summer period, the information kiosks may also be staffed by volunteers. For the creation of the information centre, it is proposed to use the existing building facilities of the Gialia Forest Station.
- Activities relating to the creation of audiovisual and printed material aiming to provide information – raise environmental awareness (e.g. information leaflets, dvd files, children's books, magazines, posters, etc).
- Activities relating to the creation of souvenirs and objects on the protected area.
- Experiential information – environmental awareness activities for visitors.

The Management Body should also give special emphasis to the following additional actions:

- Take into consideration Axis 2 of the 2007-2013 Rural Development Programme, whose aim is to “upgrade the environment and the landscape”, and which may contribute to the purpose of managing the agricultural and forest areas of the “Polis-Gialia” area. This axis makes specific reference to the provision of support to the Natura 2000 Network.

### 3. MANAGEMENT AXES

It is well known that in the last 50 years the need to protect and manage the natural environment at international level has become imperative. Rural and industrial growth, the increase of the world population, the intensive use of natural resources and the dramatic change of land uses have all caused significant pressures on the natural environment.

According to the international environmental strategy, the protection – management of the environment must aim at sustainable development, which guarantees both economic growth and the rational management and protection of the natural environment<sup>1</sup>. This environmental strategy may be distinguished into two main categories:

- The first category relates to the general management of the environment, which includes the establishment of criteria regarding in particular the emissions of pollution sources, limits for the quality of environmental means (water resources, atmosphere, etc.) and limits for the exploitation of natural resources, so as to preserve the quality of the environment at a satisfactory level, for both present and future generations.
- The second category includes the strategy for the stricter protection – conservation of specific aspects of the natural environment with high ecological value in terms of types of ecosystems – types of flora and fauna habitats. This ecological value is usually associated with the rarity and the

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<sup>1</sup> In the case of the Natura 2000 Network sites, the planning of sustainable development must always take into consideration the provisions of Directive 92/43/EEC.

degree of threat to the elements of the natural environment due to man-made activities.

According to the International Union for the Conservation of Nature (IUCN) a protected area is defined as “a terrestrial and/or marine area which is especially dedicated to the protection of biological diversity and the natural and cultural resources, and is managed through legal or other efficient means” (IUCN 1994).

At European Union level, the most important directives which establish the principles for the management of protected areas are Council Directive 92/43/EEC of 21 May 1992 (on the conservation of natural habitats and of wild fauna and flora) and Council Directive 79/409/EEC of 2 April 1979 (on the conservation of wild birds).

The principles for the management of the protected areas are also directly related to the main objectives of Directive 92/43/EEC, which aims to create the Natura 2000 European Ecological Network of Protected Areas.

Directive 79/409/EEC and its amending Directives aim at the long-term protection and conservation of all species of wild birds naturally living in the wild within the European territory of the Member States (with the exception of Greenland). More specifically, these Directives aim at the following:

- The protection, management and regulation of all species of wild birds naturally living in the wild within the European territory of the Member States, including their eggs, nests and habitats;
- The statutory regulation of the exploitation of these species.

The Protection and Management of Nature and Wildlife Law (No. 153(I)/2003) transposes Directive 92/43/EEC into the Cyprus legislation. Article 3 of the Law sets out its main objects, which are as follows:

- To protect biological diversity;
- To preserve, in a satisfactory condition, the natural habitats and species of Community interest;
- To prohibit the import, for trading purposes, of the skins of certain newborn seals and derivative products.

Article 15 of the same Law also provides for the issue of a relevant Decree for the purpose of managing and protecting the sites of the Natura 2000 Network.

The environmental objectives for the protection and management of the “Polis-Gialia” site mainly comprise the following:

- To safeguard the conservation status of the important types of habitats at satisfactory level. The most important elements of the natural environment in the area are the types of habitats which have been included in Annex 1 to Directive 92/43 EEC;
- To safeguard the conservation status of the important species of flora at a satisfactory level. The most important species of flora within the study area are the species which have been included in the Red Book of Cyprus Flora, i.e.: *Achillea maritima*, *Ipomoea imperati*, *Malcolmia nana* var. *glabra*, *Mesembryanthemum crystallinum* and *Pancreatium maritimum*;
- To safeguard the conservation status of the important species of fauna at satisfactory level. More specifically, the most important species of fauna which require rational protection and management are the following:
  - The *Caretta caretta* sea turtle, which uses the coastal area of “Polis-Gialia” as an egg-laying site, during the summer period.
  - The *Chelonia mydas* green sea turtle, which uses the marine area of “Polis-Gialia” of the Natura 2000 Network, for feeding and wintering throughout the year.
  - The species of bird fauna set out in Annex I to Directive 79/409/EEC.
  - The species of fauna set out in Annex II to Directive 92/43/EEC

- To improve and preserve the quality of all environmental means at high levels (soil, underground, surface and marine waters, atmosphere, noise), taking into consideration and in compliance with the relevant national and Community legislation.

The land-planning objectives aim at the rational layout of the man-made land uses so as to ensure the preservation of the elements of the natural environment and especially those identified as being of high ecological importance. The land-planning objectives mostly concern building construction and the spatial distribution of land uses and man-made activities in relation to objects under protection. The main aim is to protect the natural environment of the coastal zone from the expansion of man-made uses and intense or incompatible activities.

The social objectives in relation to the management of the area are the following:

- To avoid, to the extent possible, adverse social consequences from the imposition of measures and restrictions;
- To integrate, in a harmonious way, the proposed management status into the existing socioeconomic conditions of the area;
- To improve the socioeconomic conditions of the area as a result of the rational management of both the natural and the man-made environment;
- To integrate or harmonise, to the extent possible, man-made activities with the system of rational protection, management and promotion of the study area.

The economic objectives in relation to the management of the area are the following:

- To avoid adverse economic consequences for users in the area as a result of the imposed protection and management measures;
- To integrate the management status of the protected area into the socioeconomic system of the area;
- To improve, to the extent possible, economic activities as a result of the rational management and promotion of the area (e.g. tourism, agrotourism, etc.);
- To use the environmental specificities of the area with the aim of carrying out, as a matter of priority, necessary infrastructure works under Community funding programmes.

Finally, the cultural objectives within the context of the management of the area, aim at the following:

- To preserve the cultural heritage of the area through the conservation of the natural environment. The high quality of the natural environment is part of the cultural heritage of every area. It is, in other words, an element of its cultural identity and the more unique it is the more interesting and attractive it becomes both for residents and visitors.
- To develop environmental information-awareness by making the area a centre for the provision of environmental information and environmental conscience.

Based on the above, the main axes for the management, protection and promotion of the “Polis-Gialia CY4000001” protected site, are the following:

- To obtain the necessary scientific data and specifications with the aim of creating an institutional framework for the rational management of the “Polis-Gialia” protected site. The institutional framework must aim to protect biological diversity and guarantee the conservation and/or restoration to a satisfactory state of the natural habitats and the wild species of flora and fauna of Community interest.
- To manage land uses and man-made activities as best as possible with the aim of safeguarding the quality of the natural environment.
- To set up and operate a Management Body whose main objective will be to implement the Community Directives and the national legal framework.

- To make, repair and maintain the necessary infrastructure works as well as to provide the necessary scientific and technical equipment for the carrying out of the management operations.
- To see to the financial management of the Management Body and the programmes which are being implemented in the context of protection and management.
- To assign, elaborate and follow up the studies prepared in the context of the implementation of the Management Plan.
- To monitor the main parameters of the biotic and abiotic environment and especially those related directly with the important elements of the natural environment of the protected site.
- To monitor and assess the implementation of the statutory conditions and restrictions which have been imposed with the declaration and identification of the area as a protected site.
- To provide opinions and issue permits for works and activities which fall within the protected site.
- To carry out studies and research as well as execute technical or other works contained in the Management Plan and in actions plans as are necessary for the protection, conservation, restoration and promotion of objects under protection.
- To implement and further science and techniques for the protection, management and promotion of the natural environment.
- To guarantee the ongoing communication, consultation and cooperation with the local stakeholders, with the following aims:
  - The harmonious integration of the implementation of the management plan into the socioeconomic conditions of the broader area and the social acceptance of the proposed measures;
  - The elimination of existing consequences on the elements of the natural environment which are due to man-made interventions;
  - The provision of advice and information on the development of man-made activities which are compatible with the implementation of the Management Plan (ecotourism, organic farming, inclusion into Community funding programmes, promotion of local, traditional products, building construction and management of lighting so as not to cause an impact to the elements of the natural environment, etc.)
  - The consolidation of the principle that the protection of the sea turtles and the other elements of the natural environment enriches and enhances the cultural heritage of the area and contributes both to the improvement of quality of life and economic growth thanks to the attraction of visitors-tourists.
- To monitor and assess in an on-going manner the extent to which the objectives of the Management Plan are achieved, for the purpose of any future review or specialisation of the Plan. Of particular interest are the monitoring of the degree of social acceptance of the Management Plan and the identification – handling of any adverse consequences to the socioeconomic environment resulting from the imposition of the management measures.
- To provide coordination and cooperation between all co-competent services so that they may contribute to the rational implementation of the Management Plan.
- To develop and strengthen environmental information and awareness at local level.
- To develop and strengthen environmental information and awareness beyond the local level. The international promotion of the ecological significance of the protected site, of the ongoing efforts to preserve the elements of the natural environment and the implementation of the Management Plan by all services and the local society may constitute an international model for ecological management and an important pole of attraction for visitors-tourists in the broader region.

It is noted that the selection and hierarchy of the objectives set by a site which has been included

in the Natura 2000 European Ecological Network must give primary consideration to the provisions of Directive 92/43/EU.

#### **4. DESCRIPTION OF MANAGEMENT BODY**

The Management Bodies or the special local services serve in the implementation of the Management Plans of protected areas in view of ensuring the more efficient protection and conservation of the protected objects.

The necessity for their establishment is greater when the protected area includes areas of mixed nature (such as land and sea or forest areas and agricultural crops) and the protection and management measures regulate many types of activities. The implementation of measures is not, therefore, the exclusive responsibility of one Public Service and cooperation and coordination are required for the implementation of measures. Towards this direction, the Management Body may have full-time staff in order to have constant flow of information, plan and proposal processing, communication amongst the competent Services and their immediate support in the implementation of the various measures.

In addition, the meaning of the concept “protected area” includes the obligation for the systematic monitoring of its ecological features, the evaluation of the efficiency of the measures taken and the obligation to inform the public as well as raise public awareness. The institutional capabilities of the existing Public Services do not normally allow for the fulfilment of these obligations, which the Management Body or the special service is called to fulfil by providing specialised services.

When the protected area includes areas, which belong to the boundaries of more than one Local Self-Government organisations, or when its management objective is to develop compatible activities and promote the significant features in specific zones of it, or when it includes public and private areas, it is natural to require the cooperation and consent of many bodies and groups for the implementation of management. The establishment of the Management Body in such cases constitutes a podium of communication and a cooperation body in executive decision-making, in the context of implementation of the area’s Management Plan.

The Management Body is competent as follows:

- To implement the Management Plans;
- To monitor and evaluate the implementation of the regulatory terms and restrictions imposed with the declaration and characterisation of the area as protected. In this context, the Management Body should see to the collection, classification and processing of environmental information and data and documentation. To exercise this operation, the Management Body should cooperate with the competent authorities;
- To provide opinions and issue permits for projects and activities falling within the protected area;
- To assist the competent administrative and judicial authorities in controlling the implementation of the environmental legislation;
- To prepare studies and researches, as well as execute technical or other projects included in the Management Plan and in action programmes necessary for the protection, conservation, restoring and promotion of protected objects belonging to the area of its responsibility;
- To construct, repair and maintain the necessary infrastructure works as well as provide the necessary scientific and technical equipment to exercise the management operations;
- To undertake the elaboration or execution of national or European programmes and actions relating to the area of its responsibility which promote or put forward the management objectives of the protected objects;
- To inform, educate and train the population on issues pertaining to the competences and objectives of the Management Bodies, as well as to the protection of the areas of their responsibility. In this context, the Management Bodies may establish information centres, organise training and education programmes in cooperation with other competent public or private bodies, as well as conferences, one-day seminars, training seminars and other information events for the promotion of the objectives and achievements of management and undertake a

relevant publishing activity in printed and/or electronic form;

- To promote, support, organise and implement urban and tourist programmes and grant scientific research permit within the boundaries of protected objects;
- To manage public areas granted to the Body or leased by the Management Body in accordance with the relevant provisions as well as rent private areas included in the area of its responsibility and make such interventions in accordance with the Management Plan.

The Management Body should from the very beginning be in a position in terms of organisation-operation and economics to respond to its duties of Administration-Supervision and Safeguarding, provision of Environmental information and awareness, study and analysis of ecosystems and generally of the active management of the environment and to any other duties it may undertake to fulfil in the future in expanding its activities.

The Management Body should – beside its harmonisation with the requirements of the institutional framework – meet the following criteria or large part thereof:

- Flexible administrative framework and operational flexibility;
- Possibility for active participation especially in the administration bodies and in the decision-making process of such bodies of all competent departments and services;
- Concentration of decision-making competences on actions of public character and interest;
- It is therefore proposed that the establishment of the Management Body is made with provisions which shall be incorporated in the Decree for the purpose of characterising the «Polis-Gialia» area as protected.

The Management Body of the «Polis-Gialia» area of the Natura 2000 Network may comprise the following departments-services:

- Department of Environment, Ministry of Agriculture, Natural Resources and Environment
- Department of Fisheries and Marine Research, Ministry of Agriculture, Natural Resources and Environment
- Department of Forests, Ministry of Agriculture, Natural Resources and Environment.

However, an advisory committee may be established which shall comprise the following:

- Department of Environment, Ministry of Agriculture, Natural Resources and Environment
- Department of Fisheries and Marine Research, Ministry of Agriculture, Natural Resources and Environment
- Department of Forests, Ministry of Agriculture, Natural Resources and Environment
- Department of Town Planning and Housing, Ministry of Interior
- Game Fund, Ministry of Interior
- Polis Chrysochous Municipality
- Community of Argaka
- Community of Gialia
- Chrysochous Bay Local Committee of Professional Fishermen
- Cyprus Federation of Environmental and Ecological Organisations

## **JUSTIFICATION AND DOCUMENTATION REPORT ON THE PROTECTION OF THE AREA AND OF THE SPECIFIC BOUNDARY SETTING**

### **1. Significant information on the natural environment of the «Polis – Gialia» area**

#### ***General information***

The «Polis-Gialia» area in the Chrysochous Bay has a special ecological value. It is one of the areas of Cyprus which had been proposed by the Ministry of Agriculture, Natural Resources and Environment in December 2006, for inclusion in the European Ecological Network Natura 2000 which was in the process of being established. More specifically, it is the «Polis – Gialia, CY4000001» area which comprises a narrow coastal zone and a wider marine area located at the Chrysochous Bay, Pafos District, covering an area of 1726 ha. The legal status of the Network's «Polis-Gialia» area is determined by the European Directive 92/43/EEC of the Council of 21<sup>st</sup> May 1992 on the conservation of natural habitats and of wild fauna and flora, as incorporated in the Cyprus legislation with Law no.153(I)/2003 (The Protection and Management of Nature and Wild Life Law).

#### ***Types of natural habitats***

The «Polis – Gialia» area has a huge ecological significance.

As regards the marine area of the protected area, the most significant marine type of habitat of the study area is apparently the underwater Posidonia meadow (code 1120\*), since it forms a priority habitat (\*) of Annex I of Directive 92/43/EEC. The 1120 habitat type in the study area is extensive, representative and has a good conservation status. The underwater Posidonia meadow does not seem to be threatened by the existing human activities but the emerging tourism development of the region may set the status of their conservation in danger. The port works, the coast shaping projects, the free mooring, as well as the reduction of water clarity (from suspended solids or eutrophication) are, according to international bibliography, the main sources for the downgrading of underwater Posidonia meadow.

The habitat type «sandbanks» referred to in Annex I of Directive 92/43/EEC (code 1110) is extensive and representative and does not have high biodiversity (compared to type 1120) but it is, however, directly related to the egg-laying beaches of sea turtles. In habitat type 1110, underwater meadows of *Cymodocea nodosa* are found at places. The conservation status of type 1110 in the study area is good but it seems to be threatened by the man-made disturbance of the balance of sediments from immediate actions (sand mining) or immediate actions of man in the watersheds of river-streams (dams on the upper reaches) which end at Chrysochous bay. The first symptom of downgrading is the increase in the size of sand grains and later the prevalence of cobbles. In the final stage, the downgrading of type 1110 is usually followed by the expansion of type 1170 «reefs», since the rocky substratum of the coast is revealed.

The sand dune habitats of the area are significant for the conservation of the biodiversity of Cyprus, since their area have been significantly reduced and their floristic composition and structure have been downgraded in the entire island. In the majority of the few positions left, they are seriously threatened by urban expansion and tourism activities. Despite the fact that the sand dune habitats of the «Polis - Gialia» area have been downgraded, mainly in terms of their size and structure, they still have their characteristic species. Their significance is depicted in the variety of sand dune communities and the presence of ammophilous species which are rare in Cyprus. From an operational point of view, the conservation of the sand-dune vegetation and, especially of the zone of vegetation, contributes to the restraint of the sandy substratum and generally of the coastline and to the avoidance of further erosion.

In the context of the Management Plan, the habitat types which have been recognised and for which boundaries have been set in the «Polis-Gialia » area of Natura 2000 Network, are given in the following table.

**Table 1: Habitats of «Polis - Gialia» area**

| EUNIS level 3 code | Habitat Code | Priority | Habitat Type Title   |
|--------------------|--------------|----------|--|
| A5.5               | 1110         | B        | <u>Sandbanks which are slightly covered by sea water all the time</u>  |
| A5.5               | 1120*        | A        | <u>Posidonion oceanicae</u>  |
| B1.1               | 1210         | B        | <u>Annual vegetation of drift lines</u>  |
| A2.5               | 1310         | B        | <u>Annual vegetation with Salicornia and other annuals colonising mud and sand</u>                               |
| F6.8               | 1430         |          | Halo-nitrophilous scrubs ( <i>Pegano-Salsoletea</i> )  |
| B1.3               | 2110         | B        | <u>Embryonic shifting dunes</u>  |
| B1.4               | 2240         | B        | <u>Brachypodietalia dune grasslands with annuals</u>   |
| B1.6               | 2260         | B        | <u>Cisto-Lavenduletalia dune sclerophyllous scrubs (<i>Pistacio-Rhamnetalia</i>, <i>Cisto-Micromerietea</i>)</u> |
| F9.3               | 92D0         | B        | <u>Southern riparian galleries and thickets (<i>Nerio-Tamaricetea</i> and <i>Securinegion tinctoriae</i>)</u>    |
| C3.2               | CY02         | C        | Reedbeds and sedgebeds ( <i>Phragmition australis</i> , <i>Scirpion maritimi</i> )                               |
| B1.2               | CY05         | C        | Naked sandy beaches – Turtle nesting positions   |
| E1.6               | CY14         | C        | Synanthropic vegetation (dry grasslands)   |
|                    |              |          | <b>Artificial Habitats – Areas Free from Vegetation</b>  |

| EUNIS level 3 code | Habitat Code | Priority | Habitat Type Title                       |
|--------------------|--------------|----------|--|
| G2.8               |              |          | Acacia plantations                       |
| G4.F               |              |          | Mixed forest plantations                 |
| G1.D/G2.9          |              |          | Arboriculture (fruit trees/olive groves) |
| G5                 |              |          | Tamarix                                  |
| I1.2               |              |          | Crops                                    |
| I2.2               |              |          | Small-scale decorative and house gardens |
| J2.11              |              |          | Buildings (low density)                  |

The habitats which are underlined and in italics are included in Annex I of Directive 92/43/EEC.

Habitat type 1120\* which bears an asterisk has been characterised as a priority habitat according to Directive 92/43/EEC.

### ***Species of Flora***

The flora of the «Polis-Gialia» area has not been studied thoroughly. The work “Flora of Cyprus” (Meikle 1977, 1985) summarises all flora references from the wider area, but it is not always certain that they pertain to the Network’s area. Up to now, approximately 100 species within the Network’s area have been recorded based on the Standard Data Sheet, the samples and the existing bibliography.

Of the significant species of the area, the presence of the rare and threatened ammophilous species *Achillea maritima* and *Ipomoea imperati* found in very few places in Cyprus, of the endemic *Malcolmia nana* var. whose single population on the island is limited to a small area within the Natura 2000 Network’s area, of the near threatened *Pancratium maritimum* as well as of the vulnerable species *Mesembryanthemum crystallinum* is significant.

On the Gialia coast, near the boundaries of the Network’s area, one of the two sub-populations in Cyprus of the endangered species *Cynanchum acutum* is found (approximately 1 Km from the west boundary of the area).

Out of the most significant species of the area, the categories of the Red Book of Cyprus Flora are referred to below (Cyprus Forestry Association, Nicosia 2007):

- *Achillea maritima*: Vulnerable (V)
- *Ipomoea imperati*: Endangered (EN)



- *Pancratium maritimum*: Near threatened (NT)
- *Malcolmia nana* var. *Glabra*: Critically Endangered (CR)
- *Cynanchum acutum*: Endangered (EN)
- *Mesembryanthemum crystallinum*: Vulnerable(V)

The above species have already suffered losses and downgrading of their habitat in Gialia as well as in the entire island of Cyprus and their conservation depends on the conservation of sand dune habitats in the places where they still exist. In addition, at least four species are already threatened in some European countries and their population have suffered losses in the entire Mediterranean. The species *Achillea maritima*, *Ipomoea imperati* and *Pancratium maritimum* are also threatened by trampling and the cleaning of the beach as well as by further habitat reduction and downgrading as a result of tourism and urban activities in the area. *Malcolmia nana* var. *glabra* is located in a place protected by the Department of Forests, however, its habitat is threatened by a possible expansion of the neighbouring acacia plantation located next to it.

### ***Species of Fauna***

In the area, 104 species of bird fauna have been recorded of which 26 are included in Annex I of Directive 79/409/EEC and a few more tens are likely to be recorded. The majority of the species are migratory. The area is located in a migratory pathway, like many other areas of Cyprus.

However, for most species in the study area, there are no appropriate habitats for them to stay for longer periods, either while stopping to rest and eat during their migration or for wintering e.g. there are no places for aquatic and wading birds. The neighbouring area of the swamp deposition lake is not hospitable for aquatic and wading birds since there are no food resources. The existence of reeds favours some species. Furthermore, the small human presence in the spring and autumn allows some species to stop to the coast.

The nesting species of bird fauna at the coast and in the neighboring zone are 31 four of which are included in Annex I of Directive 79/409/EEC. Of these species, 24 species are found throughout the year whilst the remaining 7 are summer visitors that come to reproduce. *Francolinus francolinus* is the most significant of the nesting species. Its presence is related to game control in the area.

The area does not fully include the territories of many species since it is very narrow and does not cover all the needs of the species, e.g. *Falco tinnunculus* may be fed in the area but space is not enough since it should seek food sources elsewhere, especially during the winter period. The same applies to grain-eating species.

Despite the fact that the «Polis-Gialia, CY4000001» protected area does not form a significant nesting area, it has, however, a significant value as an intermediate migratory station and as a wintering area for some species of bird fauna.

As regards the remaining species of fauna, the sea turtles species have the greatest ecological value in the area. The presence of sea turtle species also formed the main reason for which the «Polis – Gialia» area was included in the Natura 2000 Network.

The following sea turtle species have been found in the area:

- The marine reptile *Caretta caretta* which uses the «Polis – Gialia» area for reproduction reasons and the sandy beach for systematic nesting during the summer months. In the Red Book of the IUCN, it is referred to as an endangered specie (E) and is included as a priority specie in Annex II of Directive 92/43/EEC.
- The marine reptile *Chelonia mydas* which is mainly found in young populations in the marine area of the «Polis – Gialia» protected area throughout the year for feeding and wintering. In the Red Book of the IUCN, it is referred to as an endangered specie (E) and is included as a priority specie in Annex II of Directive 92/43/EEC.

## 2. Documentation of the boundary setting of protection zones

### *High protection zone (YII)*

The sandy beach of the study area is of significant value for the nesting of sea turtle *Caretta caretta*, given that during the summer months 307 nests have been recorded. Therefore, the «Polis-Gialia» coastal area is characterized as extremely significant for the egg-laying of sea turtle *Caretta caretta*. However, in the wider area of the nesting beach, significant sand dune ecosystems have been identified which include a significant number of sand dune communities as well as the presence of sand dune species, which are rare for Cyprus. The sand dune vegetation contributes to the retention of the coastline and the avoidance of erosion. The High Protection Zone of both the beach and the sand dune ecosystems (YII) is set between the coastline and the outer land boundary of the area of Natura 2000 Network, which is identical to the boundary of the coastal zone of ecological protection of the Policy Statement of Polis Chrysochous and the Beach Protection Zone of the communities of Makounta, Argaka and Gialia. The area of the said zone is 976 da. The specific boundary setting aims at the better protection and management of the *Caretta caretta* nesting beach, of the sand dune ecosystems as well as of the endemic species of fauna.

### *High Protection Marine Zone Θ1*

The sea turtles *Caretta caretta* were observed during the 2007 summer period, as expected, near the coastline at a depth of 2-7m. During the field works at the end of July, the number of observations of *Caretta caretta* was expectedly low because the presence of the entire population of female persons (60-100 persons), in a marine area extended to 10Km of coastline and some kilometres in the marine area, reduces the possibility of observations. Due to the conservation of *Caretta caretta* turtles near the coastline and, in particular, at a depth up to 7m, Θ1 zone was proposed to have as a southern boundary the coastline and as a northern boundary the 15metre isobaths, in order to achieve the best possible protection of the specie. In this zone, the main objective is to protect the sea turtle *Caretta caretta*.

### *High Protection Marine Zone Θ2*

The marine area of study and, in particular its western part, is characterised by an increased presence of minor green turtles (*Chelonia mydas*) and it is, therefore, of a special ecological significance. Green turtles were observed mainly at a depth of 2.5-133m (average 33.9m). 80% of the observations concerns minors. 30% of the green turtle was observed along the marine area of the Natura 2000 Network at a depth of 2.5-30m. The majority of the observations were made outside the set boundaries of the Network's area at a depth of 5-35m, with greater density of observations at a distance of 3Km from the camping site within the marine area west of the marine protected area. The boundaries of the High Protection Marine Zone Θ2 were drawn with the aim to include the marine area within which the greatest frequency of presence of sea turtles was observed during the 2007 summer period.

### *Marine Protection Zone Θ3*

Posidonia meadows, which as we already said constitute a priority habitat, are found in the marine protected area. For the protection of Posidonia meadows, it was proposed to set the boundaries of the Marine Protection Zone Θ3, because these meadows are mainly observed there. In this zone, it is proposed to allow professional and amateur fishing with some restrictions as regards fishing methods as well as the duration of the stay of nets in the sea. Besides the protection of underwater Posidonia meadow, it is sought to achieve the greatest possible reduction of mortality of sea turtles as a result of fishing activities. The southern boundary of the Θ3 zone is the 15m isobaths and the northern boundary is the 50m isobaths with the exception of the zone area Θ2 where the southern boundary is the 20m isobaths.

## 3. Documentation of the proposed protection of the study area

As aforementioned, the legal status for the «Polis-Gialia» area of Natura 2000 Network is set by European Directive 92/43/EEC of the Council of 21<sup>st</sup> May 1992 «on the conservation of natural habitats and of wild fauna and flora», as incorporated in the Cyprus legislation with the Protection and Management of Nature and Wild Life Law (No. 153(I)/2003).

Article 15 of Law 153(I)/2003 provides for the issue of a relevant Decree for the management and

protection of the areas of the Natura 2000 Network. More specifically, it is stated that: «*The Scientific Committee draws an opinion for the Minister to issue a Decree for the Management and Protection of Nature with regard to the Special Conservation Zone which prohibits a specific activity, orders the undertaking of a specific activity and sets out specific conservation measures and management plans*».

For the declaration and activation of the system of protection, management and promotion of the protected area, it is proposed to use the aforementioned article with the aim to issue a relevant Decree for the Polis-Gialia protected area and the establishment of a Management Body.

In particular, in this study it is proposed to characterise the area as a “Sea Turtle Protected Area Polis - Gialia”.

The Protection Decree should be based on the proposed protection zones of the Management Plan as well as on the proposed environment protection, management and promotion measures.

According to this Management Plan, it is proposed that the area under protection comprises four protection zones: one terrestrial (YII) and three marine (Θ1, Θ2 and Θ3).

It is noted that in the procedures for the setting of the boundaries of the zones as well as selecting the proposed measures, the recommendations of the supervisory service as well as the results of the consultations with other competent services and local agencies were taken into consideration.

As regards the documentation of the proposed measures for the protection, management and promotion of the natural environment referred to in detail in paragraph 9.1.2 of this study, the following are stated:

### **Terrestrial environment**

#### ***YII Zone***

- *Planting prediction*: The said measure is proposed for the reduction of light pollution in the egg-laying of sea turtles.
- *Prediction to maintain infrastructure works*: A section of the central pipeline of the Chrysochous irrigation scheme passes through ecologically significant types of habitats. Therefore, maintenance works as well as the works of any other infrastructure networks should cause the minimum possible negative impact.
- *Prohibition of planting foreign plants*: The planting of foreign plants may create a competition with the indigenous species of the area and change the character and identity of the natural environment.
- *Prohibition of hunting*: Hunting within the YII zone is prohibited.
- *Prohibition of grazing*: Grazing within the YII zone is prohibited.
- *Replacement of lighting sources causing negative impact on the egg-laying of sea turtles*: This measure pertains to the minimisation of the impact caused from light pollution on the egg-laying of sea turtles.

#### ***High Protection Zone (YII)***

For the High Protection Zone of the beach and sand dune ecosystems (YII), the following are stated:

- *Prediction of projects aimed at the protection, management and promotion of the environment*: With this measure, necessary projects are predicted which aim at the protection and management of the area so that the protection of the ecologically significant elements of the natural environment is safeguarded and the possibility to exercise man-made activities which minimise the cause of negative impact is given.
- *Prohibition of mechanical cleaning beaches*: It has been established that mechanical cleaning alters the natural properties of the sand and renders it inappropriate for the egg-laying of sea turtles.

- Prohibition of clearing of ammophilous vegetation, disposal of debris, opening of roads and picking of plants in sand dune ecosystems: The sand dune ecosystems have suffered significant negative impact due to man-made activities. The implementation of appropriate measures for their protection is required.
- Continuation of scientific research and monitoring of the environment: The scientific research and the monitoring of the environment form basic procedures, which lead to the selection of appropriate management measures.
- Prohibition of camping, overnight stay, lighting of fire on a sandy beach: Camping, overnight stay and the lighting of fire are not proposed mainly for reasons of protecting the egg-laying of sea turtles as well as protecting the sandy beach. The overnight stay of persons is limited in order not to disturb the egg-laying of sea turtles.
- Restrictions on fishing from the beach during the night: The measure aims to avoid disturbing the egg-laying of sea turtles.
- Restrictions on placing umbrellas and sunbeds – Prediction of two community beaches: The restrictions on placing umbrellas and sunbeds are set for the minimisation of the impact on the egg-laying of sea turtles. The creation of two community beaches is proposed for use by bathers.
- Setting of the external boundaries of the sand dune ecosystems and provision for corridors or pathways for their protection: The measure aims to distinguish between man-made land uses and sand dune natural habitats in view of protecting the latter.
- Continuation of agricultural cultivations – prohibition of greenhouses and agricultural warehouses: The measure aims to minimise the impact on sand dune ecosystems, protect the aesthetic environment and the natural character of the protected area, reduce as much as possible the pollution from agricultural practices and protect the sand dune ecosystems.
- Prediction of counterbalancing measures: In case a permanent property is entirely within the YII zone and as a result it is not possible to build thereon in accordance with the proposed provisions, then it is judged that the best solution is for this property to be expropriated.
- Prohibition of building within the YII zone – prediction for maximum site location of new buildings: These measures are proposed with the aim to minimise the impact from building and light pollution to sand dune ecosystems on the egg-laying of sea turtles.
- Measure concerning noisy premises – Observance of noise conditions: It is considered best for egg-laying not to be disturbed by noise sources.
- Prohibition of vehicle traffic on the beach and on sand dune ecosystems: Vehicle traffic on the beach has a significant impact on the egg-laying of sea turtles. The deep ditches caused by the wheels on the beach form a significant obstacle to the unhindered approximation of turtles – fledglings from the nests to the sea.
- Prevention of road access to the beach – abolition of illegal roads on sand dune ecosystems: By placing fences – bars, the protection of sea turtles and sand dune ecosystems from the passing of vehicles is ensured. The abolition of illegal roads on sand dune ecosystems forms a significant parameter for their recovery.
- Continuation of the programme for monitoring the egg-laying of sea turtles: The long-term monitoring of the egg-laying of sea turtles forms a significant parameter for the evaluation of the protection and management measures. The said monitoring also contributes to the evaluation – assessment of man-made pressures on the egg-laying of sea turtles.
- Continuation of placing cages to the nests of sea turtle: This measure aims to prevent foxes from hunting the nests.
- Provision for lightweight wooden structures: The controlled installation of lightweight infrastructures for informing, raising awareness and serving visitors contributes to the urban and tourist use of the area.

- Provision for vertical pathways for controlled access to the sandy beach: In this way the protection of sand dune ecosystems from the uncontrolled crossing of visitors and bathers is obtained.
- Monitoring of beach erosion: Given the fact that phenomena of erosion of the coastline have been recorded, special emphasis should be placed on the programme of monitoring the development of the coastline.

### **Marine Environment (Zones Θ1, Θ2 and Θ3)**

For the proposed marine zones Θ1, Θ2 and Θ3, the following are stated:

- Prohibition of construction of breakwaters or other maritime structures: With this measure, the underwater Posidonion meadows and the egg-laying of sea turtle *Caretta caretta* are protected.
- Provision of port works near the marine protection zones: This term aims to avoid the creation of impact on marine protection zones from the construction and operation of anticipated works to the immediate neighbouring area.

#### **High Protection Marine Zone Θ1**

Restrictions pertaining to the period from May 15 to September 30: In Zone Θ1, sea turtles *Caretta caretta* coming to the area to nest are mainly observed from May 15 to September 30. Due to the ecological significance of the said specie, appropriate restrictions on fishing and the traffic of boats are proposed with the aim to minimise impact. It is noted that the proposed protection conditions do not apply for the remaining time period within the year (October 1– May 14). The measures proposed for zone Θ3 apply for the period from October 1 to May 14.

#### **High Protection Marine Zone Θ2**

Prohibitions of fishing, boat traffic, water culture and fishing gun use throughout the year: Marine Protection Zone Θ2 aims to protect sea green turtles. It includes the marine area within which high frequency of presence of mainly minor green turtles has been observed during the 2007 summer period. Given that green turtles are found in the area throughout the year, the proposed measures apply for the entire year. They aim to the greatest possible minimisation of man-made pressures caused on green sea turtles. For this reason, it is proposed to prohibit boat traffic, water culture and fishing gun use. In addition, free diving is also prohibited during the night.

#### **Marine Protection Zone Θ3**

Prohibition of water culture and restrictions on the speed of boats and on the fishing period: Mild restrictions and prohibitions aimed at the greatest possible reduction of the impact caused on sea turtles are proposed for marine protection zone Θ3. In particular, water cultures are prohibited and specific time restrictions are proposed on fishing aiming at the greatest possible reduction of the mortality of sea turtles trapped in the nets. It is noted that the provisions of zone Θ3 also apply for zone Θ1 from October 1 to May 14 every year.