



**Audit Office of the Republic of Cyprus**

# **Coastal management in Cyprus – the environmental perspective**

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# The audit

- **Main reasons for selecting this topic**
  1. Importance of beaches as a tourist product
  2. Importance as habitat for endangered/critically endangered species
  3. Importance for the recreation of civilians
- **Very broad scope – audit limited in following areas:**
  1. General supervision of coastline/beaches
  2. Financial management
  3. Environmental management
  4. Interventions in the coastline protection zone
  5. Waste disposal from recreational marine vessels
  6. General management issues (coastal erosion, bathing water quality, access by persons with disabilities, eutrophication)



# Audit methodology/tools

- SWOT analysis/Audit matrix
- Questionnaire
- [Use of digitized cadastral maps in conjunction with satellite imagery](#)
- Data analysis - On the site visits
- Interviews
- Letters to auditees / Responses
- Compilation of final report



# Auditing coastal management – the environmental perspective

- Beaches are an important habitat for [many species of flora and fauna](#).
- Examined the general management of coastal areas which are part of the “Natura 2000” network.
- Examined the protection measures taken for beaches which are habitat for the loggerhead and green turtles, as well as the Mediterranean seal (*monachus monachus*).
- Addressed issues of coastal erosion and waste disposal from recreational marine vessels.



# General management of coastal “Natura 2000” sites

- **Scope of the audit:** Recording and assessment of the actions of the responsible authorities to protect and conserve the natural coastline environment (flora, fauna and habitats).
- **Audit criteria:**
  1. Directive 92/43/EEC
  2. Barcelona Convention – Protocol on Specially Protected Areas and Biological Diversity in the Mediterranean.
  3. National Legislation: Law 153(I)/2003



# Directive 92/43/EEC – main requirements

- Designation of sites hosting natural habitat types and species of Community interest as special areas of conservation (SACs) and establishing conservation measures.
- Avoiding the deterioration of habitats and disturbance of species.
- Projects likely to have a significant effect on a SAC shall be subject to appropriate assessment before the competent authorities grant their approval.
- Establishment of a system of strict protection for defined animal species of Community interest, prohibiting destruction of breeding sites (irrespective of whether or not these have been designated as SACs).



# National Law 153(I)/2003 – main requirements

- Transposes Directive 92/43/EEC into National Law
- Additional provision: Issue of a Nature Management and Protection Decree for SACs, which defines management measures for the site.



# **Protocol on Specially Protected Areas and Biological Diversity in the Mediterranean**

## **– main requirements**

- Establishing specially protected areas in marine and coastal zones.
- Adopting planning, management, supervision and monitoring measures for the specially protected areas.
- Managing species with the aim of maintaining them in a favourable state of conservation.
- Compiling national lists of the endangered or threatened species of flora and fauna and according protected status to such species.





# Main findings

- No national list with all the rare/protected/ endangered species of flora and fauna, nor with all the important habitats – obligation under the Protocol on Specially Protected Areas and Biological Diversity in the Mediterranean.
- Monitoring programmes for endangered marine fauna species, implemented by the Department of Fisheries and Marine Research, are not included in official protocols or action plans.
- Despite the preparation of Management Plans for most of the coastal areas included in the “Natura 2000” network, none of them has been designated as a Special Area for Conservation, according to the provisions of Directive 92/43/EEC.



# Main findings (ctd...)

- According to national legislation, a Nature Management and Protection Decree must be issued for the areas included in the “Natura 2000”. This has not been done yet for any of the above mentioned areas.
- A [Municipality](#), prior to obtaining the required permits and submitting an appropriate Environmental Impact Assessment, proceeded with the construction of structures on a beach within the “Natura 2000” network, so as to make it more attractive for recreational purposes.
- A Local Authority destroyed [sand dunes](#) in a “Natura 2000” area. The measures to restore the damage have not yet been implemented.
- No Beach Management Plan has been prepared for certain beaches that fall within the “Natura 2000” network.



# Protection of sea turtles habitats

- Two protected turtle species nest in Cyprus beaches, the loggerhead turtle (*Caretta caretta*) and the green turtle (*Chelonia Mydas*). The nesting sites of these species in the Mediterranean region are confined to Greece, Turkey and Cyprus.
- Identified the most important nesting sites and verified these were included in the “Natura 2000” network.
- Evaluated the measures taken to protect the two species and their habitats.
- Collected statistical data regarding the number of nests/hatchings per year.



# Work done

- Observed increase in number of nests/hatchings.
- Increase in number of reported deaths of turtles – probably due to higher public awareness
- Performed [on the site visits](#) to evaluate the measures taken to protect the nests
- Investigated the impact of a proposed golf development near one of the major nesting beaches, based on the Environmental Impact Assessment.
- Examined all the relevant letters of formal notice received from the European Commission for possible infringement of the provisions of Directive 92/43/EEC and the measures taken by the responsible authorities.



# Main findings

- The implementation of the sea turtle protection plan has been assigned, after a competitive procedure, to external specialists. We recommended that the knowledge/expertise in this area is transferred, gradually, to the relevant government agency.
- According to the six-year report regarding the implementation of Directive 92/43/EEC in Cyprus, the conservation status for green turtles is characterized as “bad” but with an “improving trend”.



# Main findings (ctd...)

- Identified an [illegal structure](#) on a turtle nesting beach which is not part of the “Natura 2000” network.
- Approval was granted for the creation of a golf course, which partially extends into the “Natura 2000” network, on one of the most important turtle nesting beaches in Cyprus. The Environmental Authority admits the lack of sufficient measures to satisfy the basic principles of prevention and protection of the area.



# Main findings (ctd...)

- In the same area, six-meter wide [pavement](#) has been constructed, upon request of the Town Planning and Housing Department, in front of an existing villa complex, causing the leveling of sand dunes and the destruction of a significant part of the turtles breeding area.
- The above cases are followed by the European Commission, which has issued a letter of formal notice, claiming infringement of the obligations of Cyprus under the provisions of Directive 92/43/EEC.



# Mediterranean seals

- A very small population of this critically endangered species lives in Cyprus
- The known caves which they use as habitats have been included in “Natura 2000” sites.
- The Department of Fisheries monitors the activity of this population on the island and keeps a log with the relevant data
- Sightings/observations of seals are treated with confidentiality, as the greatest enemy of the species is the human presence
- According to the six-year report regarding the implementation of Directive 92/43/EEC in Cyprus, the conservation status for Mediterranean seals is characterized as “inadequate” with a “stable trend”.





# Lessons learned

- Use technology - Be innovative and creative!
- Engage the NGOs/specialists.
- Importance of site visits.
- Practical considerations in performing site visits (distance, accessibility).
- Make sure you have a good understanding of the subject of your audit.
- Plan but be flexible! You may need to revise more than once based on your findings.
- Set a realistic timeframe.
- Publicity – impact of the report.



# Lessons learned

- Environmental auditing can be fun

