

# **Consultation Proposal**

## **Draft Akrotiri Peninsula Environmental Management Plan**

### **1. Introduction**

1.1 The need to develop and implement an environmental management plan for Akrotiri Peninsula has been widely recognised at least since the late 1980s. Since then there have been many relevant consultations between the Government of Cyprus and SBA Administration, which included exchange of views and proposals. In recent years there has been increasing interest from other stakeholders to participate in this process, including local communities, land owners and users, NGOs (local and international), international conventions, individual environmental experts, environmental and other associations/groups and others.

1.2 On 16 April 2003 the SBA Administration prepared a consultation proposal for the Akrotiri Peninsula Environmental Management Plan (APEMP). This was based on the earlier consultations and was sent to all stakeholders identified at the time. Later in that year, there were further consultations between SBAA and Government of Cyprus departments where it was agreed that SBAA would prepare a draft plan to be used for further consultation; the government departments would provide all available relevant baseline information. It was also agreed that positive measures would be implemented in the meantime to:

- a. deal with immediate, clear threats to the site;
- b. increase the credibility of the authorities and demonstrate their commitment;
- c. convince all stakeholders, especially the local community of the potential benefits of sustainable management of the site;
- d. improve relationships with all stakeholders, increase knowledge and build capacities, in preparation for further management work.

1.3 The purpose of this document is to outline briefly the important issues identified so far in the preparation of the APEMP and facilitate further consultations between all stakeholders to complete a first draft of the plan.

1.4 Although further work on the management plan has already been prepared, it has been deemed important, based on accepted principles and professional advice, to step back and follow a more participative approach. Therefore, the current proposal is to organise a workshop where all stakeholders will have a chance to offer their views and proposals on the identified important issues and the aspirations in each component plan. The aim will be to reach the wider possible agreement on these two items and prepare the basis for the next stage which will include agreement on holistic objectives and a relevant action plan.

## **2. Immediate positive measures**

### **2.1 Positive measures taken so far include:**

1. New environmental legislation, mirroring that of the Republic of Cyprus, is continuously being promulgated by SBAA.
2. The consideration of various environmental issues has been including wider consultations with stakeholders.
3. There has been wider co-operation with various stakeholders on local conservation and other studies.
4. SBAA in co-operation with other stakeholders have established the Akrotiri Environmental Education and Information Centre.
5. SBAA have employed two Conservation Wardens.
6. Joint efforts have been made to control immediate threats.

## **3. Vision**

3.1 The proposed vision for the management plan is to achieve the sustainability of the important environmental and other features of the peninsula to the benefit of both current and future human and non-human interests.

## **4. Component plans**

### **4.1 Work on the management plan has been separated into eight component plans:**

1. Nature Conservation
2. Access, Recreation, Education and Interpretation
3. Historic Environment
4. Military Interest and Estate Management
5. Relationships with Local Communities and other stakeholders
6. Landscape
7. Hydrology/Hydrogeology
8. Non-military land use

4.2 The work on the component plans outlined below covers the ‘description’ part as well as the aspirations in respect of the interests of each component area. The current consultation proposal aims to discuss first these aspirations with a view to accommodate the views of all stakeholders and reach the wider possible stakeholder agreement. The second stage will be more ‘prescriptive’ and will include a discussion of the rationale for preparing integrated, de-conflicted, objectives, and a related action plan.

## **5. NATURE CONSERVATION COMPONENT PLAN**

### **5.1 Evaluation Criteria:**

- The Akrotiri Ramsar Site Designation Criteria.
- EU Habitats Directive 92/43/EEC transposed in RoC and SBAA legislation.
- EU Birds Directive 79/409/EEC transposed in RoC and SBAA legislation.
- IBA criteria.
- IUCN status.
- SPEC categories.
- Cyprus Red Book for Plants (under preparation).
- Protection status in international conventions (Bern, Bonn, Barcelona, CITES)
- Endemism.
- In general the evaluation criteria are based on size, diversity, naturalness, rarity, fragility, typicalness and potential for improvement/restoration.

### **5.2 Identification and confirmation of important features**

#### **5.2.1 Sources**

The sources used so far include:

- a. The Natura 2000 Standard Data Form for Akrotiri
- b. Environmental Study and Management Plan for the Akrotiri Salt Lake and Wetlands, 1992, Balasha Jalon Consultants and Phedonos Consultants Ltd
- c. EIAs for projects in the area

- d. Studies and publications of Government of Cyprus Departments and Services, Birdlife Cyprus and others.
- e. Books on local flora, fauna and other features.
- f. Discussions with various environmental experts from the Government of Cyprus, NGOs, individuals etc.

### **5.3 Tables**

5.3.1 Based on the information above tables were prepared for: habitats, flora, birds, amphibians, mammals, invertebrates, reptiles and fishes. Each habitat or species was checked against relevant criteria. The next stage in this part is to supplement the tables with further information, and relate them as far as possible to maps of geographic coverage. It would be very useful to use a Geographic Information System for this purpose.

### **5.4 Priority Lists**

5.4.1 The final part will be to use the tables to establish priority lists of habitats and species in terms of their importance and conservation status based on the criteria at section 5.1 above.

### **5.5 Factors influencing the conservation features**

5.5.1 The following natural and anthropogenic factors have been identified so far:

- Climate change, extreme weather
- Coastal erosion
- Silting of the Salt Lake
- Dune shifting
- Serial succession
- Interspecific floral/faunal relations
- Impact of water cycle/hydrology on important wetland biota
- Invasive, exotic species
- Feral animals
- Uncontrolled access
- Sporting activities
- Recreational activities

- Military installations and training
- Over-grazing
- Over-fishing, illegal fishing
- Pest control
- Wild fires
- Fly tipping and other illegal waste disposal
- Operation of Akrotiri rubbish collection area
- Uprooting of flowers
- Unsustainable collection of natural resources
- Illegal hunting
- Quarrying
- Modifications to the hydrological regime
- Aspirations for development within or close to the peninsula
- Marine/coastal pollution
- Forestry activities
- Effluent/runoff from industrial, agricultural, domestic and other sources
- Airborne pollution
- Intensified agriculture

## 5.6 **Obligations**

### 5.6.1 SBAA obligations:

- a. SBA environmental policy.
- b. International Conventions.
- c. SBA legislation.
- d. SBAA policy on non-military development.
- e. Undertakings to the Government of Cyprus, local communities etc.

### 5.6.2 Republic of Cyprus obligations and other stakeholder obligations.

### 5.6.3 Existing consents include:

- Akrotirian legal rights on part of the forest land.
- Development zoning at Akrotiri village.
- Development zoning within the Republic, north of the peninsula.
- Business licenses and building permits.
- Forest management.
- Current (and potential) military projects and activities.
- SWS effluent disposal rights.
- Limassol-Amathus Sewerage Board storm water disposal.
- Hunting licences.
- Apiculture permits.
- Borehole water-abstraction permits
- Sporting/leisure activity permits.
- Cat sanctuary.
- Fish farms.
- Fishing permits.
- New Limassol Port.
- Animal husbandry.
- Agriculture.
- BEMRS Station.
- Beach and other restaurants.
- Pigeon culling, crow shooting.
- Research licences.
- Fire permits.
- Pest control.
- RoC right to exploit commercially the salt lake.
- Quarrying permits.
- Truck maintenance.
- Akrotiri rubbish collection area.

## 5.7 Legal arrangements

5.7.1 This part includes a list of current and impending SBA environmental legislation. In general, SBA environmental legislation is mirroring, as far as possible, that of the Republic of Cyprus and will form the legal underpinning of the management plan.

## 5.8 Management restrictions

5.8.1 This includes the unavailability of resources and the lack of knowledge. The requirements in resources will be established and assessed once the management plan is completed with action plans.

5.8.2 Lack of knowledge includes:

- A detailed hydrological/hydro-geological model of the peninsula.
- The relationship of the hydrological regime (quantity, quality and timing) to different types of habitats, species, and ecological values.
- Silting levels of the salt lake.
- A confirmation of the impact of aerials on avifauna.
- Carrying capacities and limits of acceptable change of different features with relation to existing and future threats.
- Cumulative effects of different sources of negative impact.
- Quality attributes and surveys methods for various environmental features for monitoring and evaluation purposes.

## 5.9 Aspirations

5.9.1 The aspirations for nature conservation include:

- a. Promote the conservation and wise use of Akrotiri Wetlands and other environmental resources.
- b. Maintain and enhance the biodiversity of the peninsula and the integrity of its ecosystems.
- c. Maintain the priority and other important habitats and species to a favourable condition (as described in the EU definition).

## **6. ACCESS, RECREATION, INTERPRETATION AND EDUCATION**

### **6.1 Introduction**

### **6.2 Policy**

6.2.1 There is currently no official policy on access to environmentally sensitive areas. Access is restricted/controlled to certain areas such as: military areas, private land, the foreshore, the sea bathing areas, the RAF fish reserve etc. There is also regulation of civilian aircraft over the peninsula. Current recreation policy covers only certain activities such as hunting, fishing etc. Current education and interpretation policy is mostly related to the operation of the Akrotiri Environmental Education and Information Centre and the related infrastructure.

### **6.3 Past and current use**

6.3.1 The only official records of visitors are those of the Akrotiri Environmental Education and Information Centre. Current visits at environmentally sensitive areas include summer visitors at beaches, eco-tourists, schools and other educational groups, environmental experts, bird-watchers and other nature enthusiasts, dog owners, hunters and fishermen, rubbish fly-tipping, off-road and other competitions/activities, recreational/sporting activities, trailers for parking, apiarists, natural resource collection, the model aircraft club, cat sanctuary visitors, farmers, basketry, green Monday visitors etc. Visits in the past included micro-lighters, salt collection and fishing in the salt lake, hunting in wider areas, other recreational activities etc.

### **6.4 Current infrastructure**

6.4.1 Access infrastructure includes roads, tracks, footpaths, boat slipways, parking Areas etc. Environmental education and information is covered at the Akrotiri Environmental Education and Information Centre. There is also separate interest on behalf of the Bishporic of Limassol to be involved as well. Existing signs include game reserves, turtle conservation, foreshore protection, rubbish, traffic/parking, radiation hazard, sea bathing buoys etc. Recreational infrastructure includes beach and other restaurants, cafeterias etc. Infrastructure also includes nature trails, bird watching facilities, life guard services, first aid and medical services, fire fighting, public telephones, toilets etc.

### **6.5 Opportunities and threats**

6.5.1 The environmental, historical, landscape, wilderness, recreational and other importance of the peninsula outlined in the other component plans, is a very positive factor, confirmed by the big number of current and potential visitors. Other positive factors include the establishment and operation of the Akrotiri Environmental Education and Information Centre and the relevant co-operation with a big number of stakeholders, particularly the local community. There are also opportunities for

involvement of the Ministry of Education of the Republic of Cyprus in relation to formal environmental education to schools.

Negative factors that require management include haphazard and restricted access to various sites, limited infrastructure (nature trails, organised parking, bird-hides, site interpretation etc), fly-tipped rubbish, landscape intrusions, noise etc.

## **6.6 Aspirations**

6.6.1 The general aspiration is to encourage the sustainable, informed and safe access to and use of the site by all visitors (for ecotourism, education etc), to the benefit of the visitors (enjoyment, information, knowledge etc), the environment (awareness etc) and the local community (cultural, economic, recognition, involvement etc).

## **7. HISTORIC ENVIRONMENT**

### **7.1 Introduction**

This component plan consists of two parts, one for archaeology and one for cultural aspects.

### **7.2 History and archaeology**

### **7.3 Historic background, existing studies**

7.3.1 The historic background of the peninsula and existing studies are described in the 'Archaeological Desk-based Study, Geophysical and Geological Assessment' carried out in 2002 by Wessex Archaeology. There have also been various amendments and new information since 2002.

7.3.2 Important features include listed and non-listed sites as well as other historic features.

### **7.4 Legislation, statutory and other agreements**

7.4.1 Includes existing legislation and the roles of the Antiquities Department and the Western SBA Archaeological Society.

### **7.5 Threats and opportunities**

7.5.1 Threats include both natural and anthropogenic factors: erosion, looting, development, various damaging activities, limited/excessive access.

7.5.2 Opportunities include promotion of antiquity sites and their integration with environmental features for ecotourism, education etc, appropriate management of access, statutory and physical protection etc.

## **7.6 Aspirations**

7.6.1 The general aspiration will be protection and promotion of existing and potential important antiquity sites.

## **7.5 Cultural aspects**

7.5.1 Inventory of cultural aspects includes basketry, traditional wetland use and management, historical structures, wetland related oral traditions, wetland related traditional knowledge, religious aspects, beliefs and mythology, arts etc.

## **7.6 Threats and opportunities**

7.6.1 Threats include the desertion of traditional activities, the loss of traditional knowledge etc.

7.6.2 Opportunities include socioeconomic, cultural and other benefits to the local population and the site in general of cultural aspects, use of traditional wetland management knowledge to the management of the site etc.

## **7.7 Aspirations**

7.7.1 The general aspiration includes promotion of the socio-economic and other benefits to local and other people of cultural aspects, preservation of disappearing traditional knowledge and contribution of traditional wetland management in the management plan.

# **8. MILITARY INTEREST AND ESTATE MANAGEMENT**

## **8.1 Introduction**

## **8.2 Description of land and land tenure**

8.2.1 The military interest includes the aerial farms and BEMRS, training areas outside RAF camp (dry training area and parachute drop zone) and RAF Akrotiri itself. RAF Akrotiri includes a domestic site (married quarters, schools, medical centre, sports fields, swimming pool etc), Princess Mary's Hospital, a firing range, a golf course and technical sites (runway and support units, workshops, storage areas etc).

## **8.3 Land use and other activities**

8.3.1 Includes fuel installations and fuelling activities, boiler houses, explosive storage, liquid oxygen plant, airfield and dispersal areas, motor transport workshops, a photographic unit, shelters (sangers), a light arms and firing range, Princes Mary's Hospital, sewage treatment works, fire training areas, a waste tip, contractors yard, Kolossi pumping station, gas storage, water supply, foul water drainage, aircraft

operations, new buildings and developments, waste management, energy consumption, maintenance of aerial farms, activities of conservation groups (WSBA archaeological society and turtle watch), businesses, visitor activities, contractor activities etc.

#### **8.4 Important features**

8.4.1 These are covered within the other component plans and include species, habitats, landscape and archaeology. The component plans also cover evaluation of the features and legislation.

#### **8.5 Impact assessment**

8.5.1 RAF Akrotiri is covered by an Environmental Management System (EMS) meeting the standards of ISO 14001. As part of this, site and local risk assessments have been carried out for each area, activity or process and control measures have been introduced to: minimise any environmental impacts; monitor and assess impacts; and deal with potential emergencies.

8.5.2 The identified risks include potential for pollution (ground, aquifer, salt lake and other surface water, sea and atmosphere) aircraft activity over sensitive areas, risks from training activities, new buildings and developments, fires, erosion, uncontrolled access to environmentally sensitive areas, bird collisions on aerals, disruption of hydrology by aerial sites, pest control measures, grounds maintenance activities, recreational and business activities etc.

#### **8.6 Aspirations**

8.6.1 The general aspiration of this component plan is to manage the military estate in such a way so as to satisfy the military requirements, but at the same time comply with environmental policy and legislation and satisfy, as far as possible, the objectives of the other component plans.

### **9. RELATIONSHIPS WITH LOCAL COMMUNITIES AND OTHER STAKEHOLDERS**

#### **9.1 Introduction**

#### **9.2 Summary of local communities and other stakeholders**

9.2.1 Based on the Ramsar and other definitions, stakeholders are individuals, groups or communities likely to influence or to be influenced by the management of the site, including:

- a. The communities of Akrotiri, Asomatos, Cherkez, Trakhoni, Kolossi, Episkopi, Erimi, Ypsonas, Kato Polemidhia and Zakaki.

- b. Republic of Cyprus Departments: Antiquities, Forests, Agriculture, Fisheries, Lands and Surveys, Water Development, Town Planning, Geological Survey, Environment Service, Game Fund, District Officer Limassol, Cyprus Tourism Organisation, Ministry of Education, Handicraft Service.
- c. Public utility providers: Electricity Authority, Telecommunications Authority, Ports Authority, Limassol-Amathus Sewerage Board, Water Supply.
- d. NGOs/Associations: Birdlife Cyprus, The Cyprus Conservation Foundation, Federation of Environmental and Ecological Organisations, Cyprus Foresters' Association, Akrotiri Environmental Association, Akrotiri Cultural Association.
- e. International and European conventions (Ramsar, Bern, Bonn etc).
- f. Local and other environmental experts.
- g. Local and other academic institutions.
- h. Land owners/users, as described in the component for non-military land use.
- i. SBA authorities, both civil and military and related parties (military personnel and dependants, RAF business tenants, civilian employees, contractors, conservation groups etc).
- j. The media.

### **9.3 Statutory and other SBA obligations**

9.3.1 Includes the SBAA policy under the 1960 Treaty of Establishment, SBA legislation, undertakings (to the Government of Cyprus, local communities, employees etc), international and other conventions etc.

### **9.4 Current procedures**

9.4.1 Current consultations cover ad-hoc meetings of relevant stakeholders for each separate issue. SBA authorities organising such meetings are HQ BFC, HQ SBAA, Area Office Akrotiri, SBA Police, RAF Station Akrotiri and Defence Estates.

### **9.5 Stakeholder interaction with Akrotiri Peninsula**

9.5.1 Activities of stakeholders within the peninsula and the surrounding area are covered in the non-military land use and the military interest and estate management component plans.

## **9.6 Factors affecting relationships with local stakeholders**

9.6.1 The factors relating to SBA authorities include: employment and business opportunities, development policy, acquisition of land for military and non-military projects, quality of public infrastructure, health and safety issues, aircraft noise, response to local problems and complaints, protection of property, financial and technical aid to communities and institutions, leisure and recreation opportunities, environmental education and information, quality of public administration, consultation levels and openness, enforcement of legislation etc.

Interrelationships between other stakeholders, which may affect the management of the site should also be considered.

## **9.7 Threats and opportunities**

9.7.1 Again, current work on this part relates to SBA authorities only; other relevant relationships should be considered as well.

9.7.2 Threats include development issues (restrictions on non-military development, opposed military/public development etc), lack of knowledge and understanding, bureaucracy, unresolved conflicting interests, power imbalances, lack of communication/openness etc.

9.7.3 Opportunities include: employment, economic activity and development, environmental education, improved decision-making roles, increased awareness and knowledge, conservation and promotion of local culture and other opportunities in the other component plans.

## **9.8 Aspirations**

9.8.1 The general aspiration is to maintain good relationships and achieve the wider possible consensus between stakeholders to facilitate the preparation and implementation of the management plan and the achievement of its objectives.

# **10. LANDSCAPE**

## **10.1 Introduction and aims**

10.1.1 The main aim is to describe and classify the landscape interest and assess and manage existing and potential visual impacts.

## **10.2 Summary of landscape value – Policy and designations**

10.2.1 There does not seem to be any designation structure for landscape within the SBAs or the Republic other than provisions in various pieces of legislation such as the Antiquities, Town Planning etc, but further investigation is required to confirm the situation. Particular attention should be given to the European Landscape Convention.

### **10.3 Visual amenity**

10.3.1 Includes a description of the visual environment, the visual envelope and principal viewpoints, night time views and visual receptors.

### **10.4 Landscape character**

10.4.1 The peninsula is separated into seven distinct and recognisable landscape types: Salt lake and flats, Akrotiri Marsh, Citrus plantations, Akrotiri Merra and scrub, Akrotiri Village, Aerial farms and RAF Akrotiri.

### **10.5 Threats and opportunities**

10.5.1 Includes increasing encroachments, development, and activities etc.

### **10.6 Aspirations**

10.6.1 The general aspiration will be to conserve, restore and enhance the landscape character and value of the peninsula.

## **11. HYDROLOGY AND HYDROGEOLOGY**

11.1 The draft of this component plan has not yet been prepared. However, the following issues have been identified:

- a. A model of the hydrology/hydrogeology of the peninsula (and wider areas relating to important factors) needs to be prepared.
- b. Hydrology needs to be linked to the biological and ecological requirements of important environmental features.
- c. There are immediate problems that need to be addressed, such as the flooding of Akrotiri Marsh.

### **11.2 Aspirations**

11.2.1 The general aspiration of this component plan will be to maintain/restore the hydrological/hydrogeological regime of the peninsula to a favourable, sustainable status, which supports the related environmental and other interest.

## **12. NON-MILITARY LAND USE**

### **12.1 Introduction**

### **12.2 Current and potential use**

### **12.3 Land tenure and ownership**

12.3.1 Land ownership includes UK Ministry of Defence and BEMRS, Akrotiri Merra, Zakaki Merra, Forest land (and Forest land subject to Akrotirian rights), Akrotiri Salt Lake, Private land, Church land, Hali and other Crown land.

### **12.4 Legislation, policy, zoning**

12.4.1 Includes administrative boundaries, the SBAA policy on non-military development, the SBA environmental policy, Akrotiri Ramsar Site, Akrotiri Village residential zone, Foreshore protection zone, Planning/development zones in the Republic of Cyprus, the Akrotiri restricted flying area, the status of the Akrotiri and the Zakaki Merra land, Akrotirian rights on forest land, Antiquity sites, the Akrotiri Controlled Area under the Water Supply Special Measures Legislation, a list of current and impending relevant SBA legislation, international and other conventions etc. It also includes SBAA undertakings and commitments for future land use.

### **12.5 Infrastructure**

12.5.1 Includes pipe irrigation schemes, wells/boreholes, reservoirs, irrigation divisions/societies, domestic water supply, land consolidation schemes, road and other access network, power supply, telephone, sewerage, waste disposal schemes, ports, fuel supply etc.

### **12.6 Current land use and condition**

12.6.1 Includes residential development within and north of the peninsula, forest management, agriculture and animal husbandry, collection of natural resources, apiary, hunting and fisheries, sporting activities, Akrotiri rubbish collection area, storage areas, industries/workshops, the cat sanctuary, use of antiquity sites, recreational activities, restaurants, Limassol port, Miltonos storm sewer, research/monitoring/studies, parking areas etc.

### **12.7 Potential land use and condition**

12.7.1 Includes the golf course development zone north of the Salt Lake, revisions of building and other development zones, the policy for isolated dwelling houses, phase II of the Akrotiri Land Consolidation, proposed development at the reclaimed area south of Limassol port, rejected/outstanding applications for development and other activities etc.

### **12.8 Past land use and condition**

12.8.1 Includes reclaimed marsh areas for agricultural and other purposes, quarrying, micro-lighting, fishing/hunting, different areas and intensity of land use and activities at d above etc.

## **12.9 Threats and opportunities**

12.9.1 Includes an estimation of the current and potential impact of all the above activities on nature conservation and other interest.

## **12.10 Aspirations**

12.10.1The general aspiration will be to ensure that existing and future land uses are sustainable and compatible with the objectives in the other component plans.