



PARLAMENT TA' MALTA

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PARK NATURALI TAŻ-ŻONQOR - SITE PLAN

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Il-Park Nazzjonali tal-Inwadar

Management Plan Brief

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Executive Summary

The government announced in 2015 the intention to establish the first national nature park of this legislature, along the coastal and rural area bordering ix-Xgħajra, Haż-Żabbar and Wied il-Għajn local councils. In August 2015, the Office of the Prime Minister set up a steering committee to prepare a brief for the management plan of the park and to recommend a governance framework.

This document, presented for public consultation, is the draft brief for the governance and management plan of the park, which is being given the name of “*Il-Park Nazzjonali tal-Inwadar*” after the prominent location within it known as *In-Nwadar*, close to Fort St. Leonard.

This brief presents a concise overview of the natural, cultural and socio-economic characteristics of the park as identified in the 2006 South Malta Local Plan and its wider context, taking into consideration the existing policy and regulatory framework.

The Government believes that establishing a national park in this beautiful area will safeguard the natural environment and give people an open area to enjoy. The brief acknowledges this and sets out a vision where *Il-Park Nazzjonali tal-Inwadar* brings together the farming community and local residents with the natural and cultural heritage in a mosaic where open space provides a sanctuary of tranquillity, a source of knowledge and a continuous link with the surrounding landscape. Such a vision foresees increased environmental stewardship and improved practices for rural development while protecting the existing open character of this coastal area.

This vision is ambitious. The brief outlines six objectives for the park:

1. For the environment to be valued in its natural form
2. To be a model of environmental regeneration
3. To raise consciousness of:
 - The conservation of natural and cultural heritage;
 - Informal recreation to experience the rural landscape;
 - The stewardship required to foster co-existence as part of a chain
4. To promote natural areas as sources for economic growth
5. To make it a valued need that empowers the community and enhances social wellbeing
6. To act as a catalyst for existing businesses and endeavours nearby.

Twenty-eight priority actions have been identified. The actions are intended to preserve old cultural landscapes through sustainable use, to create attractive recreation opportunities in harmony with nature, to enable natural and cultural attractions to be experienced, to improve the quality of life in the south of Malta and to promote nature conservation and sustainable development. All will be done while protecting the rural landscape. The actions will be carried out through an annual business plan.

Management structures of other national parks were studied and this brief recommends the establishment of:

- A governance board, representing the main stakeholders, answering to the Minister responsible for the Environment. Its duties will include overseeing the drafting and implementation of the management plan, and providing leadership.

- A management body, answerable to the governance board, responsible for the day to day running of the park.

The brief proposes an extension of the boundary of the park by 44,000 m², out of which 30,000 m² are currently within the development zone. This extension is being proposed on the basis of what would constitute a fully functioning nature park, not as compensation for the area transferred by Parliament for the proposed American University. By extending in this way it becomes a complete entity, harmonising natural heritage, cultural heritage and the open rural landscape.

The size and extent of the park will be consistent with the vision of resource protection, compatible uses and connectivity with areas of similar use. The brief also recommends the issuance of a Legal Notice to declare the status of the park, the implementation of short term actions and the preparation of a management plan guided by the vision, objectives and priority actions outlined.

This document is the result of a consultative process, conducted with stakeholders, including farmers and land owners within the area, local councils, local communities and economic operators.

The brief reflects collective aspiration and goodwill for an amenity that all stakeholders will nurture.

Sommarju Eżekuttiv

Fl-2015 il-Gvern ħabbar il-ħsieb tiegħu li jwaqqaf l-ewwel park naturali nazzjonali matul din il-leġislatura, tul ix-xtajta rurali bejn il-lokalitajiet tax-Xgħajra, Haż-Żabbar u Wied il-Għajn. F'Awwissu tal-2015, l-Uffiċċju tal-Prim Ministru waqqaf kumitat ta' gwida biex iħejji ix-xogħol għall-pjan tal-immaniġjar tal-park u biex jirrakkomanda qafas ta' tmexxija.

Dan id-dokument, ipprezentat għall-konsultazzjoni pubblika, huwa l-abbozz għat-tmexxija u l-immaniġjar tal-park, li qiegħed jissewma Il-Park Nazzjonali tal-Inwadar. L-isem huwa imnebbah minn "in-Nwadar", hekk kif inhi mġharufa żona prominenti fil-Park, hdejn il-Fortizza ta' San Anard.

Id-dokument jiġbor fih il-karatteristiċi naturali, kulturali u soċjo-ekonomiċi tal-park kif identifikati fil-Pjan Lokali għan-Nofsinar ta' Malta tal-2006, u l-kuntest usa' tiegħu li jikkonsidra l-qafas politiku u regolatorju.

Il-Gvern jemmen li l-ħolqien ta' park nazzjonali f'dawn l-inħawi sbieħ se jħares l-ambjent naturali u jagħmilha iktar faċli għall-pubbliku biex igawdih. Id-dokument jagħraf dan u jipprezenta viżjoni fejn il-Park Nazzjonali tal-Inwadar flimkien mal-wirt naturali u kulturali jiġi flimkien il-komunità tal-bdiewa u r-residenti tal-lokalita. Hija viżjoni ta' Park Nazzjonali li jipprovdi post ta' kenn u trankwillita', għejjun ta' tagħrif u rabta dejjiema mal-inħawi tal-madwar.

Il-viżjoni hija ambizzjuża. Ġew identifikati sitt miri għall-park:

1. Biex l-ambjent jingħata l-valur fl-istat naturali tiegħu
2. Biex il-Park ikun mudell ta' riġenerazzjoni ambjentali
3. Biex titqajjem kuxjenza pubblika għall-apprezzament tal-wirt naturali u kulturali, u forom ta' rikreazzjoni għall-esperjenza tal-pajsaġġ rurali
4. Biex żoni naturali iservu bħala sors għat-ktabbir ekonomiku
5. Biex il-Park jippromwovi l-partecipazzjoni tal-komunità u jtejjeb il-kwalita tal-ħajja
6. Biex il-Park iservi ta' imbottatura 'l quddiem lin-negozji tal-madwar.

Ġew identifikati tmienja u għoxrin azzjoni prijoritarja. L-azzjonijiet għandhom il-ħsieb li joħolqu attrazzjonijiet rekrejtivi f'armonija mal-ambjent naturali, li jtejjbu l-kwalità tal-ħajja fin-Nofsinar ta' Malta u li jgħallmu dwar il-konservazzjoni tan-natura u l-iżvilupp sostenibbli. Dan kollu se jsir filwaqt li jkun protett l-ambjent rurali. L-azzjonijiet jitwettqu skont *business plan* annwali.

Wara li ġew studjati strutturi maniġerjali ta' parkijiet nazzjonali oħrajn, dan id-dokument qed jirrakkomanda t-twaqqif ta':

- Bord ta' governanza, li jirraprezenta lit-titolaturi ewlenin, li jwieġeb lill-Ministru responsabbli mill-Ambjent. L-obbligi tal-Bord jinkludu t-tfassil u t-twettiq tal-abbozz tal-pjan maniġerjali.
- Bord tal-immaniġjar, li jwieġeb lill-Bord ta' governanza, li jkun responsabbli għall-operat ta' kuljum tal-park.

Id-dokument jipproponi zieda ta' 44,000 m² fil-konfini tal-park, li minnhom 30,000 m² huma bħalissa fiż-żona ta' żvilupp. Dan it-ktabbir huwa propost fuq il-premessa ta' x'għandu jagħmel park naturali li jopera fis-šhih, u mhux bħala kumpens għall-art li ġiet trasferita mill-Parlament għall-Università Amerikana.

Permezz ta' din l-estensjoni l-park isir entità kompluta, b'armonija mal-ambjent naturali, il-wirt kulturali u l-beraħ rurali.

Id-dokument jirrakkomanda wkoll il-hruġ t'Avviż Legali li jiddikjara l-istatus tal-park, l-implimentazzjoni ta' azzjonijiet li jieħdu żmien qasir biex jitwettqu u t-tħejjija ta' pjan tal-immanigjar immexxi mill-viżjoni, l-miri u l-azzjonijiet prijoritarji msemmija.

Dan id-dokument huwa r-riżultat ta' proċess konsultattiv, li sar mat-titolaturi, inklużi l- bdiewa u s-sidien tal-art fl-inħawi, il-Kunsilli Lokali, il-komunitajiet lokali u l-operaturi tan-negozji.

Id-dokument jirrifletti aspirazzjoni kollettiva u rieda tajba għall-faċilità li t-titolaturi kollha se jindokraw.

1 Background

In 2015 the Government announced the intention of establishing a national nature park along the coastal area bordering ix-Xgħajra, Haż-Żabbar and Wied il-Għajn local councils. In August 2015, the Office of the Prime Minister set up a steering committee, which was entrusted with two tasks:

- (a) Prepare a brief for a management plan of the park, stocktaking the existing characteristics and uses, setting out a vision, objectives and priority actions and identifying potential funding avenues;
- (b) Recommend a governance board for the park.

In compiling the brief, the steering committee consulted a wide range of stakeholders including farmers and land owners within the area, local councils, local communities and economic operators.

The steering committee is composed of:

- Four (4) individuals on the basis of their experience: Perit Ruben Abela, Ms. Michelle Borg, Mr. Steve Borg, Perit Michelle Piccinino;
- Two (2) representatives of the Consultative Council of the South: the Hon. Silvio Parnis and Dr. Jason Bonnici.

The Committee is co-chaired by Mr. Alex Muscat, from the Office of the Prime Minister, and Mr. Louis Borg, from the Ministry for Sustainable Development, the Environment and Climate Change.

This document was prepared independently from the outline development proposals for the part of the American University of Malta proposed at Żonqor. It is recommended that this development should take full knowledge and be guided accordingly by this brief.

Owners of property within the park should be aware that proposals in this document have no bearing on their land title.

2 Scope of the Document

The first part of the report presents a stock take of the existing characteristics and uses to provide a comprehensive overview of the assets and issues. It also presents the relevant policy framework. On the basis of this information the results of the analysis of the strengths, weaknesses, opportunities and threats of the area are put forward. It is after an understanding of this information that the second part of this brief was prepared, defining a vision, objectives, priority actions and a governance framework.

This is to serve as a strategic document that guides both the establishment of the eventual governance structure, responsible for overseeing the setting up and implementation of the park, as well as the preparation of a management plan to outline detailed actions, respective time frames, financial estimates and the human resources required for the day to day running.

The preparation of this document has also benefited from consultation with stakeholders in the area, primarily local councils, land owners, those that utilise the agricultural land within the site, and the National Independent Forum for Sustainability (NIFS).

Interested bodies and the general public are invited to give their views and comments to improve upon this draft brief with an aim at seeing the successful establishment and implementation of a national park in this region of the Maltese Islands. The input received will be taken into consideration in drawing up the final document.

3 Site Description

This section of the report provides a concise description of the park area, highlighting distinct features of significance, covering both land and sea, through a desk study based on information available from MEPA and additional sources. This stock take identifies the issues and pressures that would require management intervention. The area covered by this stock take incorporates the park boundary as identified in the South Malta Local Plan of 2006 with an approximate land area of 0.929 km² / 929,000 m² (Map 1) and the immediate rural and marine areas in the vicinity in order to provide the broader contextual setting.

Map 1 – Nature Park Area as indicated in the 2006 SMLP



The predominant uses to the western side of the park include the sewage treatment plant at Ta' Barkat and a number of livestock farms and stables alongside the park's boundary. The residential area at ix-Xghajra is at a further distance from the park. The main use to the eastern flank is residential development, both at the upper reaches along Triq Għaxqet l-Għajn and at Żonqor, and recreation, with the Żonqor Pool dominating the promontory just outside the park's boundary.

The landward side is dominated by agricultural land that separates the park from Ғaż-Ғabbar. Along this stretch of land, parallel to the coastline, the park is flanked by an access road that links Żonqor with the residential area at Triq Għaxqet l-Għajn and continues through a country lane that leads to Fort San Leonardo and eventually to Ғaż-Ғabbar. Access points from this road towards the coast exist throughout the park's breadth; they were originally used as pathways by farmers.

The main features that characterise the park are the topography of the land, where the landward side is on relatively higher ground and slopes gently towards the coastline, and the predominance of a rural landscape, an asset that has gradually attained more value among the Maltese population over time.

This area has a landscape of continuity between rural land and the coast that is nowadays rare on Malta. It also provides a complementary green lung to adjacent residential communities. The value of this site is recognised not only locally but also in the wider geographical context of this part of the island (from the Grand Harbour to Marsaxlokk Bay) having high urban populations and significant industrial developments.

3.1 Natural Heritage

3.1.1 Geology

The coastline consists of a narrow, weathered, gently sloping rocky shoreline with two narrow shore platforms located at Is-Swali. The area to be managed is part of the north-eastern coastline of Malta, characterised by a low lying exposed shore in contrast to the cliffs of Malta's southern coastline. The coastline from ix-Xgħajra to Żonqor point is made up exclusively of the Xlendi and Mara Lower Coralline Limestone (LCL) and Lower Globigerina Limestone members with a well developed phosphate pebble bed (Map 2). The impacts of wave action on lower coralline limestone often results in sea caves along the Maltese coast, and this area is no exception. The chain of sea caves at is-Swali is a manifestation of the exposed element of the Mara LCL member. Towards the east, the coast at sea level is largely developed in Lower Globigerina. The area exhibits a conjugated system of joints, fissures and faults dissecting the coast, striking NE-SW and NW-SE direction, with Quaternary deposits associated with some of the faults. Faulting, together with wave action, also results in erosion of the Globigerina member, manifested here by inlets such as at Il-Ġolf l-Abjad and Il-Ġolf ta' Xuxetta.

The Mara LCL layer is particularly rich in fossils and a fine example of large echinoid spines; giant foraminifera fossils (*Lepidocyclus*) are observed almost everywhere but particularly on the western part. The ix-Xgħajra coast has concentration of *Lepidocyclus* more readily accessible than in similar sites elsewhere in the world. At Żonqor Point there is an excellent exposure of Phosphate bed and stratigraphic contact between the Mara and Lower Globigerina. The available reports propose the protection of the coast as Level 1 Site of Scientific Importance (SSI) for Geomorphology, Lithostratigraphy, Palaeontology & Possibly Quaternary palaeontology; and Fort San Leonardo as Level 1 SSI Lithostratigraphic Type section.

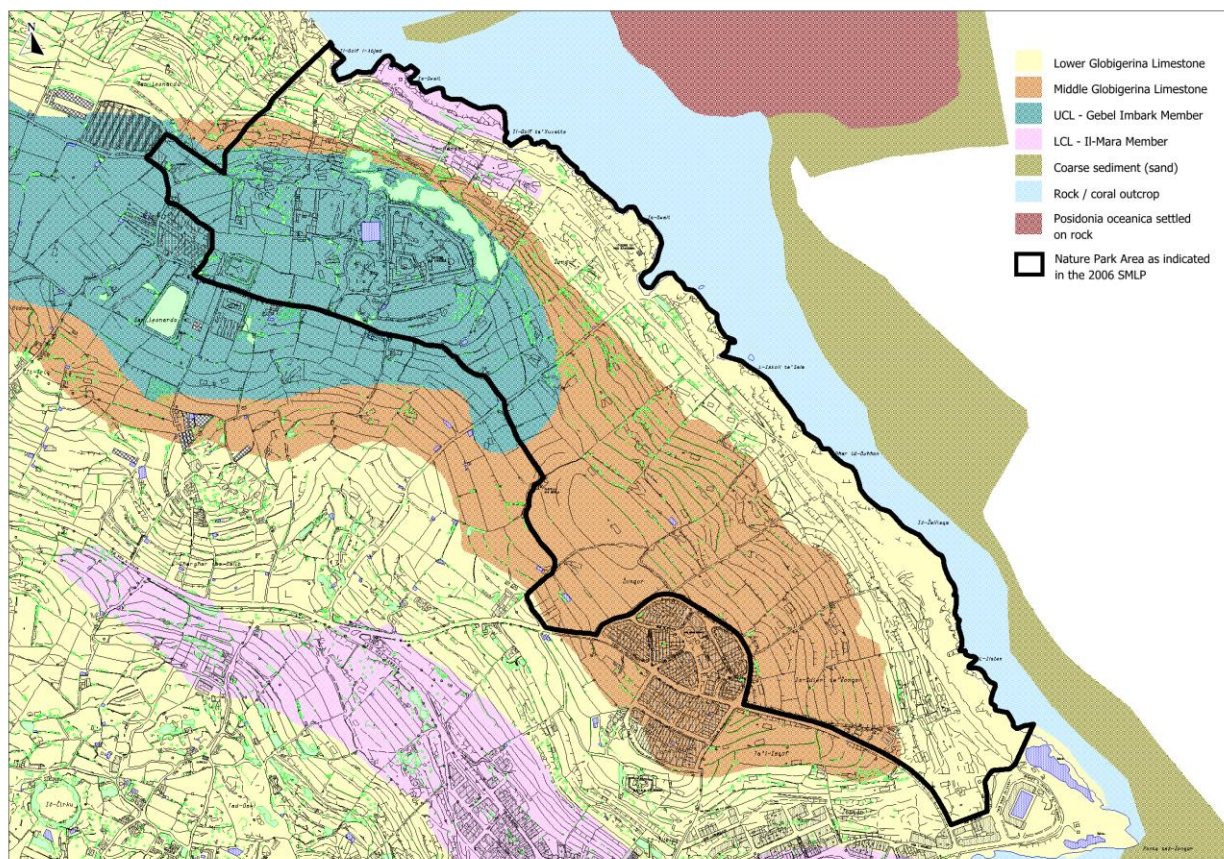
Videographic underwater surveys carried out to identify the benthic habitats for the 2007 Land Reclamation Feasibility Study (Scott Wilson) indicate that most of the seabed consists of rock and coral outcrops. These most probably consist of the Il-Mara and Xlendi Members of the Lower Coralline Limestone, reflecting a continuation from the exposed coast. Down slope of these outcrops, the seabed is characterised by exposed coarse sediment (mostly sand) that is likely to have been transported from the submerged valleys of the Grand and Marsamxett Harbours where it was originally deposited. The rest of the surveyed area, consisting of meadows of *Posidonia oceanica* settled on rock, are located approximately 500m from the coastline at Ras il-Ġebel, Blata l-Bajda, and Is-Swali.

The exposed nature and concentration of fossils, and examples of large echinoid spines and giant foraminifera fossils (*Lepidocyclina*) of the Mara LCL, assigns particular geological significance to the coastal area.

The existing and potential threats for the coastal stretch, identified at the time when the surveys were carried out (2000 and 2006) included urban sprawl, infrastructure works, coastal developments including marinas, dumping of rubbish, road works and coastal erosion.

Another threat was abundant algal growth along the water's edge in ix-Xgħajra, as a result of the untreated sewage discharged at Wied Għammieq. With the development of the Sewage Treatment at Ta' Barkat the latter threat can be considered as addressed.

Map 2 – Coastal Geology & Seabed composition



Source: Oil Exploration Directorate 1993 & Scott Wilson 2007

3.1.2 Ecology

Terrestrial

The terrestrial ecology of the area (Map 3) is influenced by the proximity to the sea along the low lying rocky shoreline and the influence of agriculture along the higher grounds further inland. The supralittoral, i.e. the area closest to the water's edge, is characteristically bare of terrestrial vegetation. As distance from the coastline increases, the habitat is typical of a coastal maritime garigue with a variety of salt tolerant species, the most dominant of which is the Golden Samphire (*Inula chritmoides*; M: Xorbett).

The presence of a number of species of high conservation value, as indicated in Table 1 below, imparts a significant value to the Park area. According to the report of surveys, the Ice plant's (*Mesembryanthemum crystallinum*; M: Kristallina Kbira) abundance along ix-Xgħajra – Żonqor coast is the only large population of this species in the Maltese Islands. The Maltese salt tree (*Salsola melitensis*; M:Xebb) is protected as an endemic species under the Flora, Fauna and Natural Habitats Protection regulations of 2006. The rest of the species do not have any statutory protection at present.

Other endemic species or species having a rare and/or restricted distribution in the Maltese Islands, or a restricted Mediterranean distribution, have also been recorded (MUS, 2000). These include the Seaside sea lavender (*Limonium virgatum*; M: Limonju tal-baħar) and the Rock Crosswort (*Crucianella rupestris*; M:Kruċanella).

Table 1 Species of High Conservation Value

Scientific Name	Maltese	English	Comments
<i>Salsola melitensis</i>	Xebb; Siġra tal-Irmied	Maltese Salt-tree	Endemic to the Maltese Islands. Frequent on the coastal cliff along the western, southern and eastern coasts of Malta, much of Gozo, Kemmuna and some of the smaller islets; occasionally also inland on hillsides, particularly in Gozo.
<i>Anthemis urvilleana</i>	Bebbuna tal-Baħar	Maltese Sea-chamomile	Endemic to the Maltese Islands. Common in coastal habitats. A small annual herb. [RDB 33: endemic]
<i>Desmazeria pignattii</i>	Żwien ta' Malta	Pignatti's Fern-grass	Sub-endemic; being found in the Maltese Islands and SE Sicily (Provinces of Ragusa and Siracusa). Uncommon; mainly confined to low-lying rocky coastal habitats. A small annual grass which is easily overlooked.
<i>Jacobaea maritima</i> subsp. <i>sicula</i> = <i>senecio bicolor</i>	Kromb il-Baħar Isfar	Sicilian Silvery Ragwort	Sub-endemic; being found in some small islands around Sicily and the Maltese Islands. Frequent, especially close to the sea and, quite often, also inland. Until recently, the plants had been referred to <i>Senecio bicolor</i> in

Scientific Name	Maltese	English	Comments
			works pertaining to the Maltese flora and ecology.
<i>Crucianella rupestris</i>	Kruċanella	Maltese Crosswort	A species with a restricted geographical distribution, being confined to the SE of the Mediterranean, the south of Sicily, the Maltese Islands and Lampedusa. A strictly coastal species tied to both low-lying rocky coasts as well as cliffs.
<i>Mesembryanthemum crystallinum</i>	Kristallina Kbira	Iceplant	Rare and restricted to coastal habitats. The Xgħira-Żonqor stretch represents the only large population in the Maltese Islands; elsewhere it only occurs sporadically. [RDB 12: very rare, restricted Mediterranean distribution]

Source: E. Lanfranco in San Anard, San Niklaw and Bidni Rural Landscape Area (NIFS, 2015)

The 2015 survey reported two anomalies on site: (i) the presence of the Maltese centaury (*Palaeocyanus crassifolius*; M: Widnet il-Baħar), normally confined to cliffs and (ii) the rare Mediterranean Dropseed (*Sporobolus pungens*; M: Niġem tar-Ramel), normally restricted to coastal sand-dunes. The report of survey states that the presence of this species in a non-sand-dune habitat is unusual. Such observations may reflect the increased influence of human intervention in the area.

The area around Fort San Leonardo is characterised by afforestation. Apart from the alien Blue Leaved Acacia (*Acacia cynaophylla*; M: Akaċja), other Mediterranean species present include the Tamarisk (*Tamarix africana*; M: Bruka); Aleppo pine (*Pinus halepensis*; M: Żnuber) and Holm oak (*Quercus ilex*; M: Siġra tal-Ballut).

Typical vegetation associated with agricultural land was also recorded. Cultivated fields support the presence of Prickly Pear (*Opuntia ficus-indica*; M: Bajtar tax-xewk), Carob (*Ceratonia siliqua*; M: Ħarruba) and Fig trees (*Ficus carica*; M: Tina). On the other hand, opportunistic species, typical to areas associated with abandoned terraced fields and areas that were subjected to dumping, were also recorded. Such species include the Tree mallow (*Lavatera arborea*; M: Ħobbejża tas-siġar) and the Fennel (*Foeniculum vulgare*; M: Bużbież).

The invasive alien species Kaffir Fig (*Carpobrotus edulis* M: Xuxet San Ġwann) was recorded extensively along the stretch of rocky shore in both surveys. The report of survey in 2000 recommended the systematic removal of the invasive alien species (*Carpobrotus edulis*) and the profuse litter and inert material dumped in the area. These recommendations were reiterated in the 2015 report.

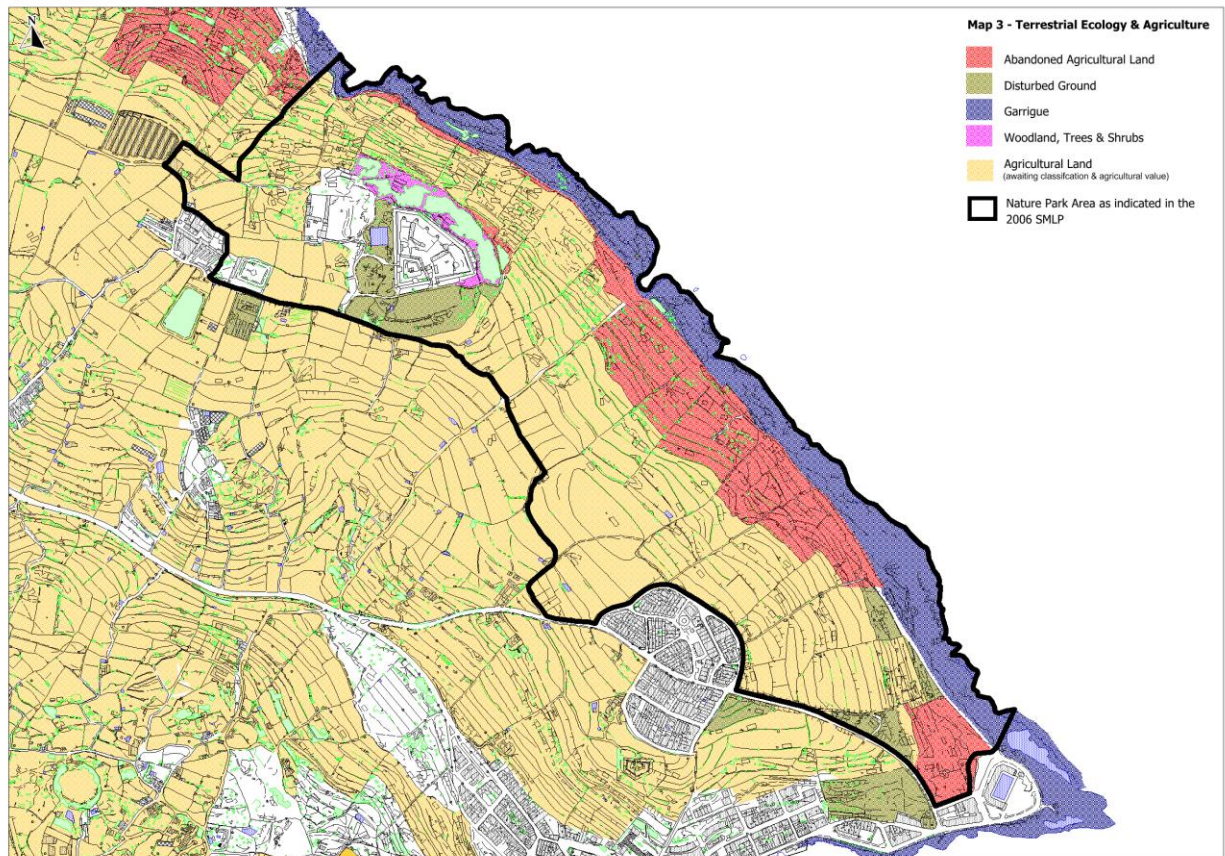
The presence of the Ice plant along the rocky shoreline between ix-Xgħajra and Żonqor was deemed as significant; a recommendation to designate this as a Site of Scientific Importance as well as an Area of Ecological Importance was made in the 2000 report. This report also recognised the importance of agriculture practices for safeguarding the rural landscape, recommending their designation for

Scheduling as Areas of Agricultural Value, proposing the uptake of cultivation in those fields where natural vegetation has not yet established itself.

The presence of a number of species of high conservation value on land imparts a significant value to the park, particularly the presence of the only known large population of the Ice plant in the Maltese Islands. While agriculture as a land use is not considered as a threat to the overall protection of terrestrial ecological habitats, the gradual transition from abandoned agricultural land to ecological habitats is seen positively.

The persistence of illegal dumping and the continuous presence of the invasive alien species *Carpobrotus edulis* are considered as the main threats to the terrestrial ecology of the site.

Map 3 – Terrestrial Ecology & Agriculture



Source: MEPA database (MUS 2000)

Marine

Benthic surveys carried out as part of the 2007 land reclamation feasibility studies and existing MEPA data base give a clear indication of the main seabed habitats present within the submerged coastal area from ix-Xgħajra to Żonqor (Map 4). The main benthic communities are similar to those that are characteristic of the infralittoral and upper circalittoral transition zones (i.e. wholly submerged areas) that occurs off the northeastern coast of the Maltese Islands. The surveys identified maerl beds from the deeper parts of the eastern half of the study area, muddy coarse sands and heterogeneous sediments, *Posidonia oceanica* meadows and infralittoral algae on rocky substrata. The most extensive assemblage type was the biocoenosis of coarse sands and muddy heterogeneous sediment.

Four species of conservation value have been identified in the coastal waters adjacent to the Park. Table 2 provides the respective protection status afforded by the Flora, Fauna and Natural Habitats Protection Regulations 2006 that transpose Malta's international commitments into national legislation. The designation of Special Areas of Conservation does not need to be afforded to all areas where the respective species is present but is directed to representative areas within the national territory. On the other hand, strict species protection may be undertaken at a national level through specific regulations that manage human activities.

Table 2: Species of conservation value in the marine environment

Species	English name	Flora, Fauna and Natural Habitats Protection Regulations, 2006	Corresponding protection to be afforded
<i>Posidonia oceanica</i>	Neptune Grass	Schedule III	Animal and plant species of national interest whose conservation requires the designation of Special Areas of Conservation.
<i>Cymodocea nodosa</i>	Lesser Neptune grass	Schedule III	Animal and plant species of national interest whose conservation requires the designation of Special Areas of Conservation.
<i>Lithophaga lithophaga</i>	Date Mussel	Schedule V	Animal and plant species of Community interest in need of strict protection.
<i>Paracentrotus lividus</i>	sea-urchin	Schedule VIII	Animal and plant species of national interest whose taking in the wild and exploitation may be subject to management measures.

Source: Scott Wilson 2007

The species composition of the assemblages recorded is typical of benthic habitats that are located in places subject to anthropogenic disturbance and to pollution, particularly on the western part closer to ix-Xgħajra. In particular, the seabed in deeper waters (>20m) supports a biocoenosis of infralittoral stones and pebbles that has resulted from the dumping of material of terrestrial origin. The report states that locally it is very unusual to find such an assemblage type in this depth of water. The unusually extensive accumulations of small boulders, stones and pebbles throughout the depth range surveyed

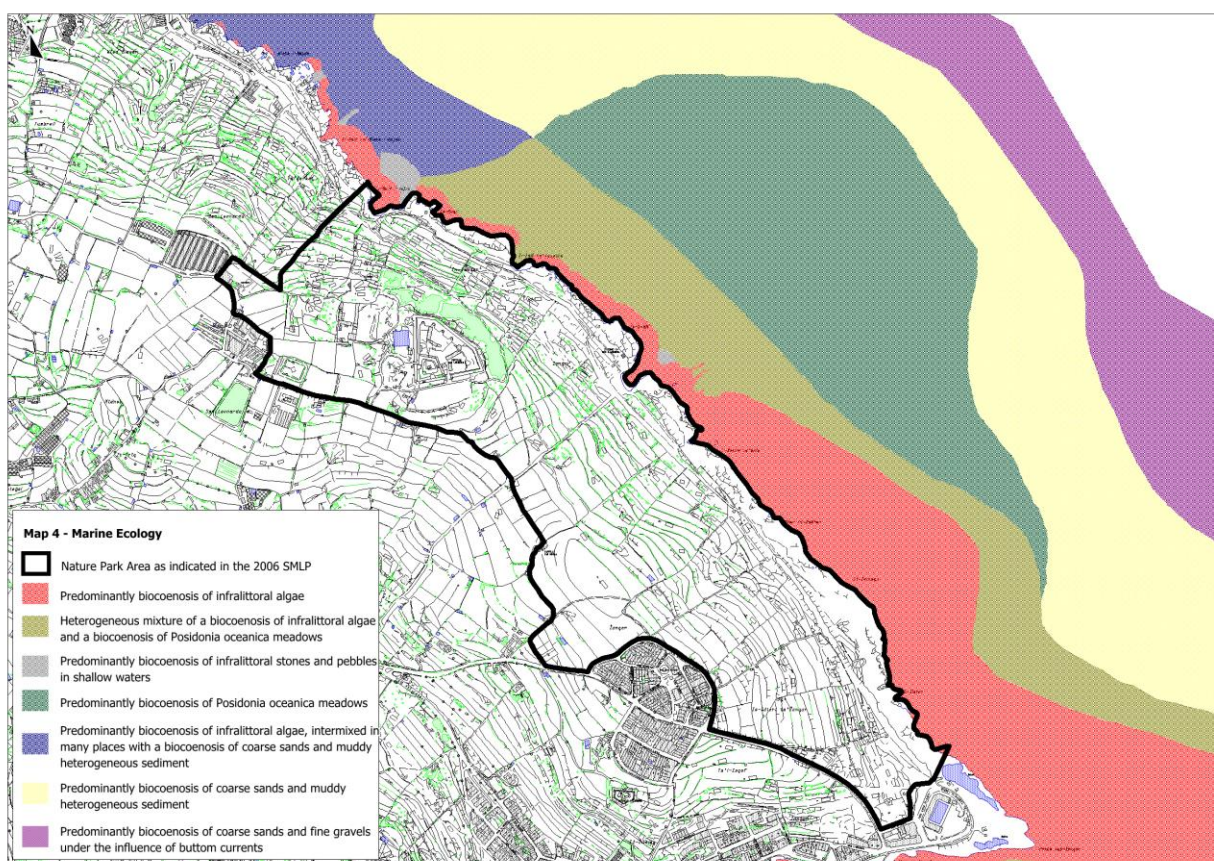
(0m – 53m) appear to have resulted from dumped construction, excavation and demolition waste. It is pertinent to highlight that the official marine dumping ground for inert material is located off the coast from the Grand Harbour entrance, suggesting that over time material drifted gradually with prevailing bottom currents. In waters deeper than 20m, this artificial bottom supported a biocoenosis of lower infralittoral to upper circalittoral hard beds, which is an unusual habitat locally.

While the spatial extent of species worthy of conservation in the marine environment is not considered to be comparatively significant on a national scale, their presence and variety of benthic assemblages along the coast adjacent to the park reflect the environmental potential of this coastal area. The presence of specific species that merit strict protection, or whose exploitation may be subject to regulations, indicates the potential for synergy between the park management and other national objectives.

The main threats to the benthic environment were linked to the raw sewage effluent at Wied Ghammieg, now ceased, and dumping, both close to shore and material probably drifting from the official offshore dumping site. The magnitude of these two sources of chronic marine pollution affects the health and distribution of benthic communities. With the development of the Sewage Treatment at Ta' Barkat, one of these sources of pollution has been eliminated.

Ecological surveys undertaken for the purpose of preparing policy documents or specific reports normally consider large scale habitat distributions which would be indicative of the health and status of biodiversity in the area. Detailed surveys, particularly addressing different fauna species, are in general limited. To this extent, it can be extrapolated that, due to the area's predominant rural character, other terrestrial species are present, including reptiles, mammals, insects and other invertebrates. Fish population data is also very scarce for coastal waters in general. Only specific detailed studies, carried out as part of a purposely designed monitoring programme, would provide more insight to species diversity.

Map 4 – Marine Ecology



Source: Scott Wilson 2007

3.1.3 Ornithology

The ornithological potential of this coastal stretch was addressed in the land reclamation feasibility studies carried out in 2007. At the time of the study the area was still dominated by the Ricasoli Industrial Estate and Wied Ghammieg untreated sewage outfall. The Rinella Film Facilities and the residential areas at ix-Xgħajra and Żonqor, all provide discontinuity to the rural coastal environment. The coastal garigue habitat, with scrub and low bushes further inland together with the stands of trees and shrubs linked with agriculture, are considered to be potentially attractive to resident and migrant birds.

Records from 1986-87 indicate that the area held considerable numbers of Short-toed larks (*Calandrella brachydactyla*; M: Bilbla), which breed mainly in garigue habitat in the Maltese islands. Numbers of this species over the Maltese Islands have declined drastically mainly due to urbanisation, changes in agricultural practices and predation of eggs and chicks by predators, including rats. Another breeding species with preference for the same type of habitat is the Corn bunting (*Emberiza calandra*; M: Durrajsa). In the past Short-eared Owls (*Asio flammeus*; M: Kokka tax-Xagħri) and Stone Curlews (*Burhinus oedichnemus*; M: Tellerita) used to breed in such habitats. These four species are considered at EU level as High Nature Value (HNV) farmland birds and indicator species of the overall health of the countryside.

The thick but sparse clumps of vegetation offer ideal nesting facilities for the Sardinian Warbler (*Sylvia melanocephala*; M: Bufula Sewda) and Spectacled Warbler (*Sylvia conspicillata*; M: Bufula Ħamra) as well as the tiny Zitting Cisticola (*Cisticola juncidis*; M: Bufula ta' l-Imrewħa), which constructs its nest in loose vegetation and long grasses. The presence of trees and shrubs in the proximity of Fort St Leonard, as well as similar vegetation within cultivated land, provide such suitable habitats. The more common Spanish Sparrow (*Passer hispaniolensis*; M: Ġħasfur tal-Bejt) usually nests in cracks and crevices in cliff faces but also in human habitations.

During migration most species of birds, including herons and other wading birds, tend to follow the coast and may alight on the low lying rocks, either to rest or to feed. The rock-carved saltpans attract small to medium sized waders during both migration periods. When undisturbed, small waders such as Common Sandpipers (*Actitis hypoleucos*; M: Pispisella) and the rare Turnstone (*Arenaria interpres*; M: Monakella Imperjali) are seen feeding singly or in small flocks. Along the low lying rocky shoreline single Kingfishers (*Alcedo atthis*; M: Ġħasfur ta' San Martin) may be seen catching small sized fish and, while some continue on their journey south, others over-winter in the Maltese Islands. Records of other migratory species, such as finches, are lacking from the area. However, the number of trapping sites identified through aerial photography over time, suggest that such species alight on the fields within the park.

Wintering birds are also recorded in the area. Most notable are members of the Lariid group, namely the Black-headed Gull (*Larus ridibundus*; M: Gawwija Rasha Kannella) and the Mediterranean Gull (*Larus melanocephalus*; M: Gawwija Rasha Sewda). Both species were found to congregate in large numbers at the sewage outfall off Wied Ġħammieq. Single Cormorants (*Phalacrocorax carbo*; M: Margun) have been recorded offshore but also resting on the rocks, elevated above sea level. Other wintering birds associated with open rural environments include the Common Stonechat (*Saxicola torquata*; M: Buċaqq tax-Xitwa), Black Redstart (*Phoenicurus ochrurus*; M: Kudiross Iswed), Robin (*Erithacus rubecula*; M: Pitiross), Songthrush (*Turdus philomelos*; M: Malvizz) and Skylark (*Alauda arvensis*; M: Alwetta).

Records also indicate offshore seabird activity in the area where a continuous northerly movement of Scopoli's shearwaters (*Calonectris diomedea*; M: Ċiefa) is noted, about three hours before sunset from February to October. They travel at various distances from the shore, depending on the weather, but on average they were observed at 2-5km offshore. Between October and July, few sightings of the Yelkouan shearwaters (*Puffinus yelkouan*; M: Garnija) were observed offshore. Sightings of the smaller Storm Petrel (*Hydrobates pelagicus melitensis*; M: Kangu ta' Filfla), which is highly pelagic, have been on the increase since the introduction of fish farms along the southern coast.

Other seabirds observed offshore in the locality include the Northern Gannet (*Morus bassanus*; M: Sula); Slender billed Gull (*Larus genei*; M: Gawwija Munqarha Rqiq); Audouin's gull (*Larus audouinii*; M: Gawwija Munqarha Aħmar); Lesser Black Backed Gull (*Larus fuscus*; M: Gawwija Darha Iswed) and Little Gull (*Larus minutus*; M: Gawwija Żgħira); Black Terns (*Chlidonias niger*; M: Ċirlewwa Sewda) and White winged Black Terns (*Chlidonias leucopterus*; M: Ċirlewwa tal-Lvant).

Because of the extensive dumping of litter and inert material, particularly over the past two decades, and increased human recreational activity, the potential for these breeding birds to establish themselves in the area has been limited. Nonetheless, available information suggests this coastal stretch has a potential role for breeding, migratory and wintering birds.

3.2 Cultural Heritage

3.2.1 *Landscape*

The geology, geomorphology and topography have a direct influence on the landscape character of the area. The Landscape Subject Plan of 2004 (MEPA) identified the presence of historic structures close to the shore and the pleasant long distance views, towards the sea and towards Valletta, that can be enjoyed from a number of vantage points as enhancing landscape features in the park area. On the other hand, the same study identified this coastal area as probably the most dilapidated in the Maltese islands, where littering, abandonment and dereliction prevailed.

The landscape sensitivity of the park area ranges from very high in the proximity of Fort San Leonardo, to high along most of the shoreline. The rest of the agricultural land was identified as an area of significant sensitivity.

3.2.2 *Paleontological/archaeological features*

Archaeological features have been recorded and identified in the vicinity of the park, specifically at ix-Xagħra tal-Bidni where dolmen and megaliths were recorded in the early 20th century. The site has been afforded legal protection as a scheduled Class B Site of Archaeological Importance, through Government Notice 1089 of 2009. Adjacent to this area is the circular field called iċ-Ċirku which is a doline structure where paleontological remains, as well as pottery, were recorded. It was also scheduled as a Class B Site of Archaeological Importance as well as a Level 2 Site of Scientific Importance. Megalith remains are known from within the park area, in the vicinity of Fort San Leonardo. Recent observations in the park area have also identified a small circular feature on the rocky shoreline. The typology and period of such a feature still need to be ascertained by the Superintendence of Cultural Heritage.

No recorded evidence exists of underwater archaeological features, however the fact that the park area is located between the Grand Harbour and Marsaskala Bay, two natural harbours that have been witness to human activity for a long time, attributes a high underwater archaeological potential to the area (Scott Wilson, 2007).

3.2.3 *Religious and civil architecture (16th - 18th centuries)*

A number of chapels and wayside shrines are located in rural areas throughout the Maltese countryside. The agricultural area to the hinterland of the park is no exception. Along Triq il-Bidni is the wayside Shrine of the Three Crosses and a chapel dedicated to il-Madonna Tad-Dawl, while along Triq il-Wied there is the chapel dedicated to Sant' Antnin ta' Padova. All these features date from the early modern period to the Knights of St. John (1530-1798).

Within the park area is a chapel dedicated to San Nikola from the same period; it is located in Marsacala but managed by Haż-Żabbar Parish, suggesting that religious activities still take place. Another structure that dates back to the early 17th century is the Convent of San Leonardo (also known as id-Dar tal-Barunessa), located at the western periphery of the boundary. In 2006, the complex, with its grounds, was scheduled as a Grade 2 structure through Government Notice 492 of 2006.

3.2.4 *Military architecture (16th - 20th centuries)*

The Maltese Islands' history is intimately linked with various naval powers over centuries. The role of the Islands, as well as their susceptibility to military attacks from the sea, is documented in the numerous coastal defence structures around the islands' coastline, with a fair share of these structures located in the park area.

Coastal Towers and Entrenchment Lines

Records indicate that the Knights of St. John built three towers along the stretch of coast from ix-Xgħajra to Żonqor, however only one remains at Triq il-Wiesgħa in ix-Xgħajra. The coastal towers at Delle Grazie and Żonqor point have both been demolished. The Knights also enclosed the coastline with a line of entrenchment flanked by a rock-cut ditch running from Il-Ġolf l-Abjad to l-Ilsien. Both the tower at Triq il-Wiesgħa and the entrenchment wall are scheduled as Grade 1 properties through Government Notice 729 of 1995. Restoration works on the coastal towers was carried out in recent years by a non governmental organisation.

Coast Artillery Forts

Coast artillery forts, built by the British in the late 19th century, include Fort San Leonardo, armed with four guns. The fort is associated with a path finding station which consists of a group of rooms, serving military functions, together with an adjacent shooting range and a Depth Defence Post, consisting of a block house on 2 levels. For more than three decades, the fort and the associated structures have been utilised for animal husbandry, where modifications and accretions have been undertaken to accommodate this incompatible use.

Wartime Beach Defences and Reserve Lines

Just before World War II the British set up a number of constructions to form part of the Wartime Beach Defences and Reserve Lines. A row of beach-posts armed with machine-guns and small arms were built on the coast at a distance of 200m apart, with a parallel line of pillboxes as a reserve line some distance behind.

Table 3 lists the military/defence architecture as identified in a 1996 survey, along ix-Xgħajra to Żonqor point. Insensitive modifications, dumping, land reclamation for agricultural use, and incompatible uses are the main threats arising from human activities. Coastal erosion is also identified as a potential threat, particularly to those features located in close proximity to the water's edge.

Table 3 Military Defence features

Feature	Location	Threats
Beach Post & Beach defence light	Is-Swali	Insensitive modifications and sea erosion
Coast Artillery Searchlight	Żonqor	More insensitive modifications
Coast Artillery Searchlight	Żonqor	More insensitive modifications
Beach Post & Beach defence light	Triq il-Wiesgħa	More insensitive modifications and covering by dumping
Depth Defence Post	San Anard	Insensitive modifications
Coastal Tower	Triq il-Wiesgħa	Sea erosion and collapse
Heavy Anti-aircraft Battery	San Anard	Land reclamation
Coastal entrenchment	Ricasoli to Ras iż-Żonqor	Sea erosion, dumping and collapse
Fort San Leonardo	San Anard	Decay through misuse

Source: Farrugia, 1996

3.2.5 Industrial heritage

This section deals with features associated with historical use of the land for primary production such as agriculture, salt production and mineral extraction.

Dry stone walls

Dry stone walls are regarded as an integral part of the Maltese landscape and part of the cultural and traditional identity of past agrarian societies (MEPA 2003).¹ Constructed primarily as a defence against soil erosion, particularly in terraced fields, they also served as boundary demarcation. The agricultural land in the park area is dominated by terracing, with dry stone walls constructed purposely to assist crop production. The degree of maintenance of these walls reflects the status of the agricultural land it envelops; abandoned agricultural land is linked with dry stone walls in need of repair.

The presence of dry stone walls/rubble walls, associated with agriculture, also serves as a habitat for a variety of species, and a corridor between local ecological communities. They not only benefit agriculture, guarding against soil erosion and acting as a wind breaker, but contribute to biodiversity protection too.

Salt pans

Salt pans in the Maltese islands are associated with low lying shorelines with geological material that can be moulded and sculptured relatively easily. A high concentration of salt pan complexes are located in the south of Malta; two are within, or in proximity to, the park area. Data availability as to their current status, in terms of physical conditions and use, is very limited. The cultural value of salt pans has been mostly ignored since only a few have been afforded legal protection.

¹ Rural Strategy Topic Paper, MEPA 2003

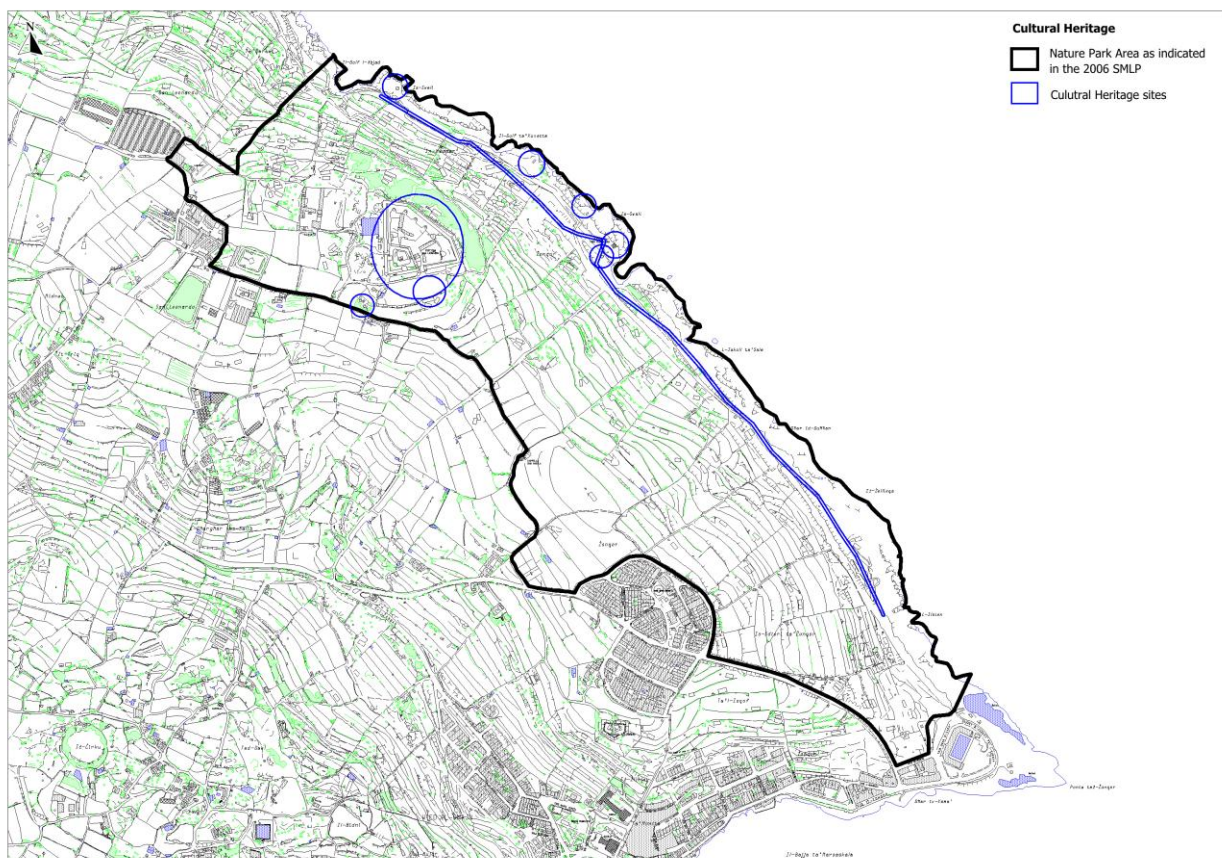
Salt pans in the proximity of the park area are found at Blata l-Bajda and Żonqor Point (MEPA, 2002)². Structures on the shoreline are used to store ancillary equipment for salt harvesting.

Mineral extraction

The presence of historical structures, particularly linked with coastal defence and the geological composition in the area, raise the possibility that source material may have been extracted on site. There is scope to survey the area to assess this potential.

A number of structures from different historical periods are located within or near the park. They add to the cultural landscape of the area. The potential exists to enhance the cultural value of the park through proper maintenance and use of these assets. There is also scope to increase awareness about the significance of the surrounding landscape to the identity of adjacent communities. The main threats to cultural assets are insensitive works, misuse and abandonment. There is also the natural threat of coastal erosion for assets that are close to the waterline.

Map 5 – Cultural Heritage



² Coastal Strategy Topic Paper, MEPA 2002

3.3 Existing Uses

Existing uses of the area are influenced by topography, location and history. The major permanent land use is agriculture, with crop production dominating. There is a degree of land abandonment closer to the shore, where the impact of salt spray harms crop productivity. Agriculture-related structures, including reservoirs, are spread throughout the park area, albeit sparsely. Livestock farming is concentrated in the north western part of the park area, with two farms adjacent to the park boundary, one adjacent to Fort San Leonardo and another livestock farm within the Fort itself. Bird trapping is confined to the agricultural part whereas hunting can also take place closer to the coastline. The recently adopted regulations on bird trapping identify trapping restriction zones. All the shoreline within the park and the abandoned agricultural land parallel to the informal road are identified as such zones. On the shoreline salt production is still taking place. These extractive activities make direct use of the natural processes in the area where the geology of the shoreline influenced the location of the salt pans.

Bathing is not common along the coastline primarily due to the historical contamination from the old sewage outfall at Wied Għammieq. The exposed nature of the coast also plays a part. Bathing is more popular in more sheltered areas along the rocky coast to the east of Marsascala Bay and within St. Thomas Bay. Bathing was observed closer to ix-Xgħajra. None of the coastal stretch within the park is to-date identified as an official bathing area by the Environment Health Directorate for monitoring purposes, however bathing is not officially restricted either. The shoreline also attracts other summer users for temporary stays in camping tents or caravans and evening barbeque gatherings. These activities are mainly close to Żonqor where vehicular access is easier and the shore is wider and relatively smoother.

Footpaths that transect perpendicularly between the coastline and the edge of the park from Triq San Leonardo provide links with Hż-Żabbar. Track marks of vehicles and motor bikes were observed along the shore near the coastal Tower at Triq il-Wiesgha indicating that illegal off-road activities take place. Another use in the park, which is transient in form, is walking, which can be considered as form of recreation.

The lateral edges of the National Park are dominated by two developments, the sewage treatment plant complex at Ta' Barkat, ix-Xgħajra and National Pool, Wied il-Għajn, which is identified as a location of part of the premises for the proposed American University of Malta. The outfall for the national flood relief project is located on the shore beneath Fort San Leonardo while the residential area at Triq Għaxqet l-Għajn flanks the southern end of the park.

Discussions are taking place between the local farming community and the Water Services Corporation to assess the potential of tapping the polished water, to be produced at the Sewage Treatment Plan at Ta' Barkat, for irrigation purposes.

The major permanent land use is agriculture. Livestock farming is concentrated in the north western part of the park area. Sustaining crop production through efficient use of resources, particularly treated water, could help achieve sustainability objectives.

The enforcement of existing regulations should reduce, if not eliminate, the potential conflicts arising from hunting, trapping and off-roading interfering with agriculture and park visitors.

The coastal area adjacent to the park is not identified as an official bathing area and, therefore, not included in the national bathing water quality monitoring programme. The potential of caravan use in the park requires further assessment.

Existing footpaths may provide access between the park itself and the wider rural area and residential communities in the hinterland. At the same time, the illegal road development on site has opened the area for uncontrolled vehicular access. Visitor access to the park needs to be managed and current access points from ix-Xghajra, Wied il-Għajn and Haż-Żabbar, safeguarded.

The urban and infrastructure developments close to and within the park may reduce its attractiveness, especially if there are visual impacts from a lack of sensitive design and landscaping.

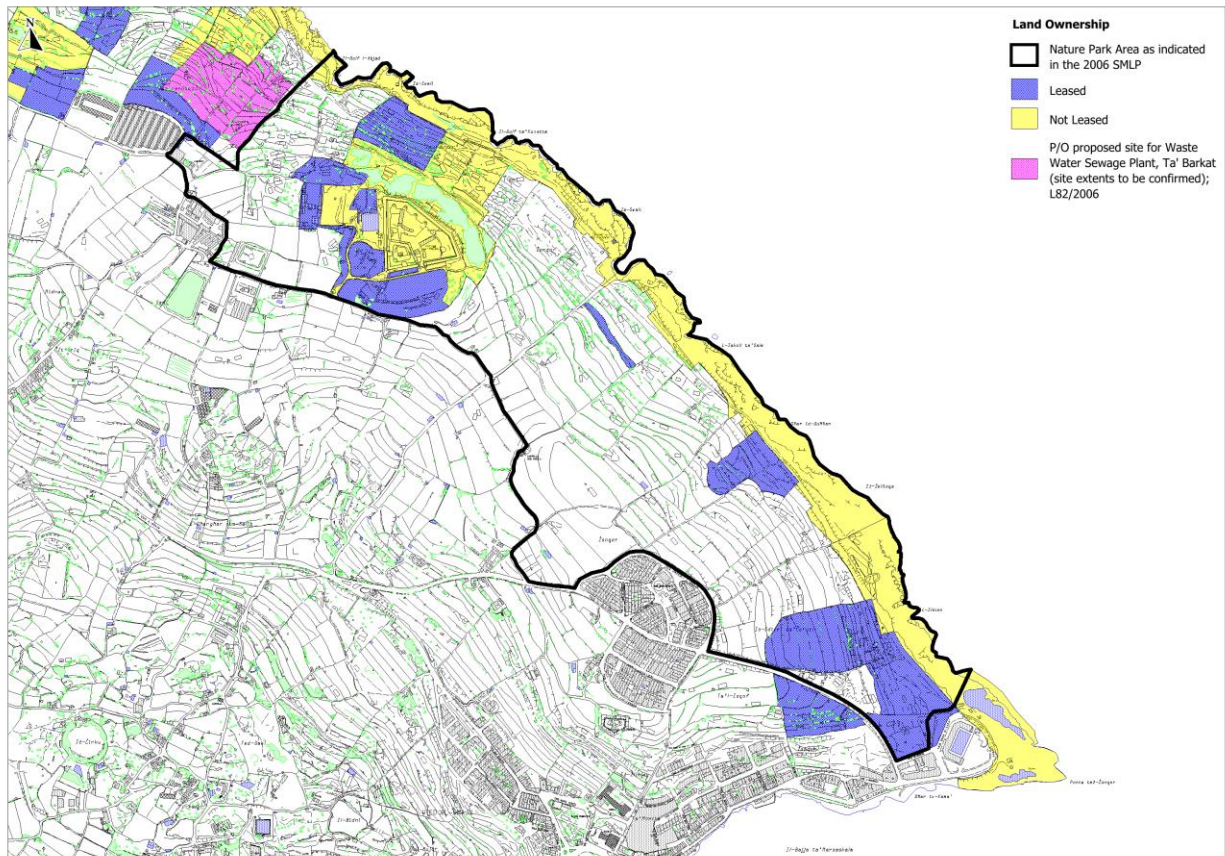
On the marine side the main uses are recreational fisheries, scuba diving and snorkelling but no statistics or data exist to ascertain the scale. Dive schools market the Żonqor Reef for recreational dives. Other shore dives are linked to the vessels at the mouth of Marsaskala bay, scuttled in the mid 1990s, while deeper dives on wrecks are undertaken, the most popular of which are Le Polynésien, a French freighter sunk in WWI lying at a depth that varies between 53m and 70m off Is-Sikka Tal-Munxar and the British destroyer, HMS Southwold, sunk in WWII at a depth of around 70m off Is-Sikka San Anard.

3.4 Land ownership and management

3.4.1 Land ownership

Map 7 illustrates land ownership within the park area. Most is under private ownership with the exception of the shore, Fort San Leonardo and its surrounding area, and parcels of land towards Żonqor point. The tower at Triq il-Wiesgħa is under the management of Fondazzjoni Wirt Artna, Fort San Leonardo is occupied by a farm and the majority of the agricultural land under government ownership is leased to third parties.

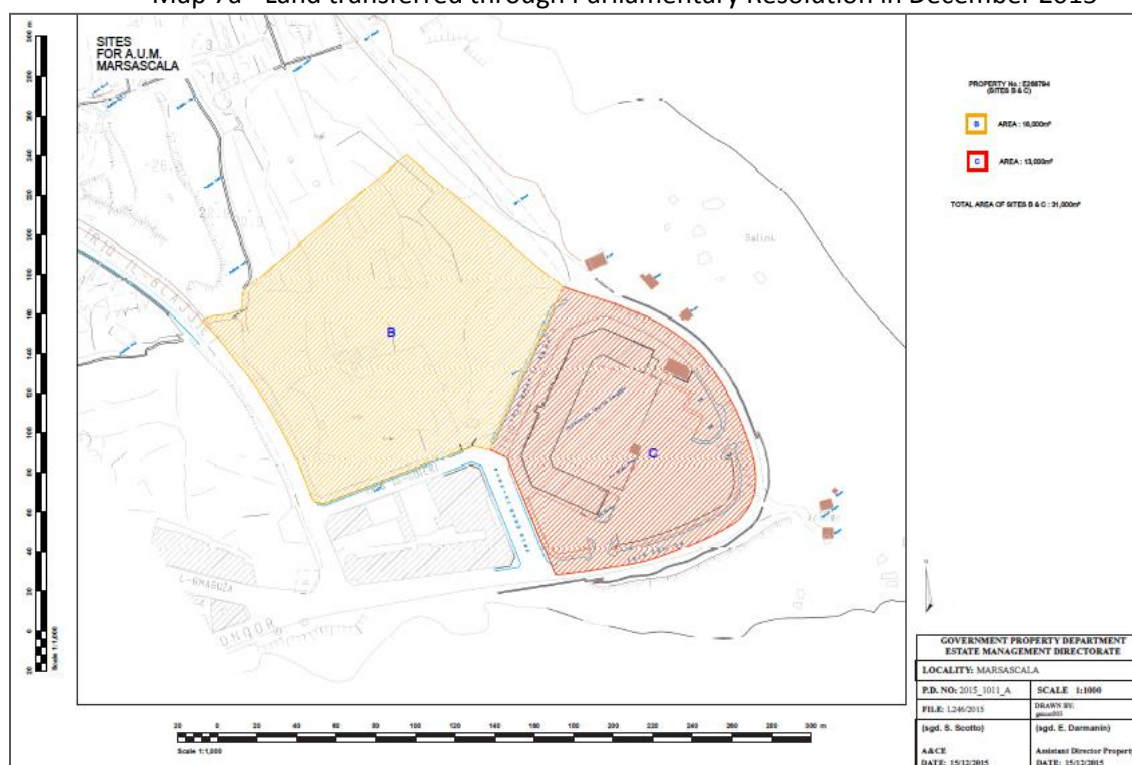
Map 6 – Land Ownership



Source: Government Property Division

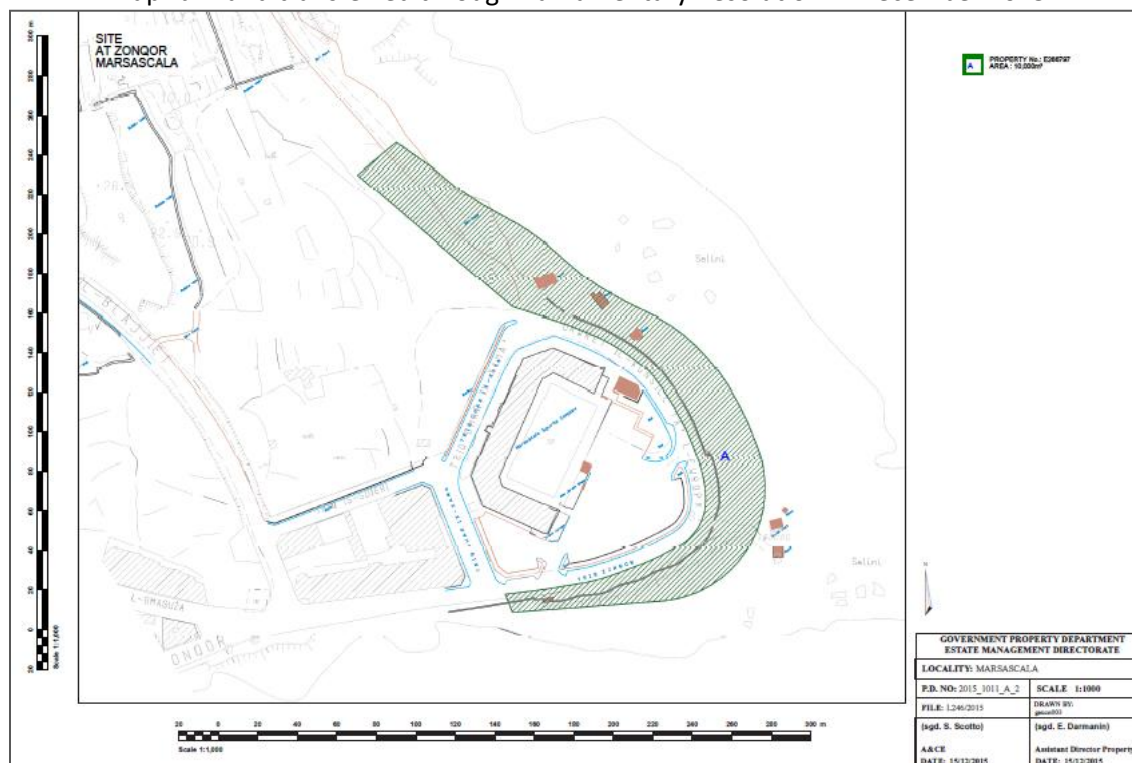
In late 2015 a resolution in the House of Representatives was passed where 41,000 m² of land was granted on a temporary emphyteusis to a private investor, Sadeen Education Investment Limited. The resolution foresees that 31,000 m² of the land is developed while about 10,000 m² (the green buffer from the coastline) is rehabilitated and landscaped. The land area covered by the parliamentary resolution is shown in Maps 7a and 7b below.

Map 7a - Land transferred through Parliamentary Resolution in December 2015



Source: Government Property Division

Map7b - Land transferred through Parliamentary Resolution in December 2015



Source: Government Property Division

3.4.2 *Land use permits and enforcements*

Development permit applications

Since 1992 approximately 50 development applications have been submitted in the park area and its immediate vicinity. Most were related to agriculture in terms of crop production and livestock farming, mainly for the development of reservoirs, storage rooms or building of dry stone walls. Other proposals were linked to the provision of infrastructure, ranging from telecommunications to the creation of tunnels for storm water runoff. Two project proposals of a significant scale, that never materialised, were for the development of a desalination plant in 1995 and a caravan site, submitted in 2009. Both projects were government-led and for the eastern part of the park area.

Records indicate that since 1992 a total of 17 development permits have been approved within the proposed park area. This figure includes multiple applications submitted for the same projects over time, thus reducing the extent of approved development to 11. Ownership influenced the project locations and most of the requests were concentrated towards the western part of the park.

The main area with approved developments is to the west of Fort San Leonardo. The site includes a reservoir, an animal husbandry farm, stables and a low frequency antenna. The levelling of debris and placing of topsoil abutting the Fort was also approved. Other development related to agriculture and salt extraction was also approved, together with an application by a local NGO to restore it-Torri ta' Triq il-Wiesgha.

Development Notification Order (DNO)

Within the same period only a handful of DNO applications were submitted, with 3 of them obtaining approval. These include the development of water reservoirs and replenishment of agricultural land with topsoil. One of the reservoirs was eventually covered by a development permit.

Enforcement cases

Records indicate that more than thirty (30) enforcement cases are linked with the park area and its immediate vicinity. Most of them relate to construction works associated with agriculture while some deal with the deposition of material. Most of the cases have been closed, either because the applicant removed the illegal structure or developments were sanctioned by permit. The remaining cases, amounting to approximately thirteen (13), relate to illegally dumped material, agricultural rooms and the farm within Fort San Leonardo.

The main development requests are agricultural-related, asserting the fact that agriculture is a major land use in the park area. The nature and scale of some of them may not have been in line with planning policy, causing them to be declined. The majority of enforcement cases recorded were linked to agriculture-related uses.

Infrastructure-related development is linked to useful/integral elements. Historical cases linked to the farm at San Leonardo and illegal dumping are still live issues. The rights of property holders need to be taken into consideration when developing and implementing the management plan.

4 Policy framework

4.1 Legislation

The main legal instruments concerning the protection and sustainable use of natural and cultural resources are the following Acts, as amended:

- Environment and Development Planning Act 2010
- Malta Resources Authority Act 2001
- Cultural Heritage Act 2002
- Fertile Soil (Preservation) Act 1973
- Fisheries Conservation and Management Act 2001
- Disposal of Government Land Act 1977

Government departments and ad hoc entities are already entrusted with the implementation of these Acts of Parliament. Subsidiary legislation to these Acts is considerable, however the most significant to the management of the park area are listed in Table 4. These include regulations for the main activities known to occur within or in the vicinity of the park, namely agriculture, hunting and trapping, fisheries and off-roading. Fly tipping is also regulated, as well as environmental protection including biodiversity.

Table 4 List of related Regulations

Reference	Title
<i>Fisheries</i>	
SL 425.01	Fishery Regulations 1934 as amended
SL 425.11	Management of the Lampara Fishery Order 2013
<i>Water Resources</i>	
SL 423.12	Notification of Groundwater sources Regulations 2008 as amended
SL 423.32	Borehole drilling and excavation works within the saturated zone Regulations 2008 as amended
SL 432.40	Groundwater (metering) Regulations 2010 as amended
<i>Environment Protection</i>	
SL 504.02	Reptiles (Protection) Regulations 1992, as amended
SL 504.13	Rubble Walls and Rural Structures (Conservation and Management) Regulations 1998 as amended
SL 504.14	Motor Vehicles (Offroading) Regulations 1997 as amended
SL 504.16	Trees and Woodlands Protection Regulations 2011
SL 504.37	Waste Regulations 2011 as amended
SL 504.43	Protection of waters against pollution caused by Nitrates from agriculture sources Regulations, 2003 as amended
SL 504.61	Marine Mammals Protection Regulations 2003 as amended
SL 504.67	Abandonment, dumping and disposal of waste in streets, public places or areas Regulations 2005 as amended
SL 504.71	Conservation of Wild Birds Regulations 2006 as amended
SL 504.73	Flora, Fauna and Natural Habitats Protection Regulations 2006 as amended
SL 504.85	Prevention and Remedying of Environment Damage Regulations of 2015
SL 504.107	Marine Policy Framework Regulations, 2011
SL 504.108	Nitrates Action Programme Regulations 2011 as amended
SL 504.129	Water Policy Framework Regulations 2004
SL 504.130	Protection of groundwater against pollution and deterioration Regulations, 2009

Reference	Title
	as amended
<i>Development Control</i>	
SL 504.103	Development Planning Procedure for Applications and their Determination Regulations, 2010 as amended
SL 504.80	Development Notification Order Regulations, 2007 as amended

4.2 Policy

4.2.1 National Environment Policy

This policy provides six main environmental objectives for environment protection in the Maltese Islands. The policy links environment protection with environmental health, efficient and sustainable use of resources and promotes innovative measures to ensure that economic growth does not result in harmful effects on the environment. The relevant objectives were taken into consideration in formulating the vision for the national park, as well as its management.

NEP Objectives

1. **Greening the economy:** addressing environmental policy integration, the use of market-based instruments, environmental taxation, eco-innovation, green jobs, enabling the private sector to take a stronger role in environmental management, green public procurement and mobilising finance for the green economy.
2. **Safeguarding environmental health:** addressing air quality, noise, chemicals, and radiation.
3. **Using resources efficiently and sustainably:** addressing stone, fresh water, coastal and marine areas, soil, land and waste.
4. **Pleasant places:** Improving the local environment by addressing urban and rural areas, and cultural heritage.
5. **Greening Gozo:** addressing more sustainable forms of agriculture, transport and tourism, and improved resource management, within the framework of eco-Gozo.
6. **Long-term sustainability:** addressing climate change, biodiversity and ecosystems, and environment-related emergencies.

The NEP recognises the need for good governance and dedicates a specific section on implementation. Areas that are relevant to the successful management of the national park are:

- Steer significant resources towards environmental regulation and management, ensuring maximum use is made of EU and multilateral funds.
- Empower people to actively participate in environmental management and take action on environmental issues.

4.2.2 National Biodiversity Strategy and Action Plan

The National Biodiversity Strategy and Action Plan (NBSAP) provides a comprehensive policy framework for protecting biodiversity in the Maltese Islands and aims to improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity, as well as by reducing pressures on biodiversity and promoting sustainable use. It presents a set of 19 targets with various actions, to guide action by 2020 at a national scale. The targets that may be considered of direct relevance for the national park and its management are listed in Table 5.

Table 5 Relevant NBSAP Targets for the National Park

NBSAP National Targets	Relevance to the National Park
Target 3: Positive incentives for conservation and sustainable use of biodiversity are increasingly promoted. Malta cooperates in efforts to address environmentally harmful subsidies.	Biodiversity is an integral component of the park. Scope to evaluate the success or otherwise of fiscal incentives related to legal activities already occurring in the park.
Target 7: areas under agriculture and aquaculture are managed sustainably, ensuring the conservation of biodiversity.	Most of the land area is used for agriculture. Management of this activity within the park enables greater opportunity to understand long term synergies between this economic activity and the park's biodiversity objectives.
Target 9: Measures are in place to prevent, in so far as practical, the introduction and establishment of new invasive non-native species, while those that are established are identified and prioritised for eradication or control, where feasible.	Regular monitoring and the sounding of an alert should new invasive non-native species be identified. Easier to control on land than at sea, but the presence of <i>Carpobrotus edulis</i> would be addressed,
Target 11: The risk of local extirpation of known threatened species has been reduced, with 30% of the species of European Community Importance in the Maltese territory having a favourable or improved conservation status	Species of European Community Interest are not known in the park area however a number of endemic species are recorded. Management is likely to assist achieving this national objective. Should the contiguous marine area be included within the park, then this target would apply to the Date Mussel <i>Lithophaga lithophaga</i> .
Target 14: The impacts of climate change on ecosystems have been reduced, in so far as feasible and, mitigation and adaptation responses to climate change that support and conserve biodiversity have been agreed and are being implemented.	Safeguarding biodiversity and allowing habitat restoration is essential to enhancing resilience to climate change. Allowing space for local biodiversity to extend inwards, and not be squeezed between the shoreline and agriculture, is important for reducing national biodiversity vulnerability. Scope for including monitoring indicators related to long term impacts of climate change on certain indicator species within the biodiversity monitoring programme.
Target 17: The contribution of local communities/entities to the sustainable management of biodiversity is recognised and enhanced	The active farming community and vicinity of three urban areas provide opportunities for an active role in the management of the park.
Target 18: Knowledge, the science base and technologies relating to biodiversity, its values, functioning, status and trends, and the consequences of its loss, are improved and applied.	A managed park is synonymous with data collection and improved awareness on biodiversity.

4.2.3 Climate Change Adaptation Strategy

The Climate Change Adaptation Strategy of 2012 provides a set of recommended actions for the Maltese Islands to adapt to the predicted impacts of climate change. While most of the recommended actions are of an administrative nature, there are a number of actions that can be considered to be directly relevant to the management of the national park. These are listed in Table 6 below.

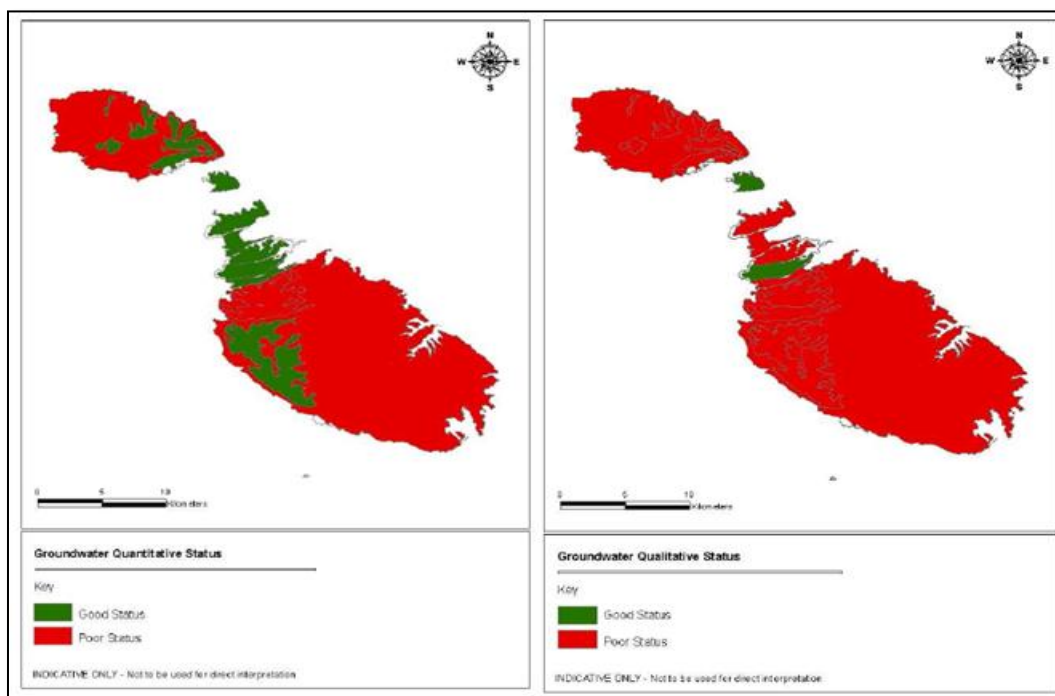
Table 6 Relevant Climate Change Adaptation recommended actions

Climate Change Adaptation Action		Relevance to the National Park
Action 17	A core pillar of the adaptation strategy is the continued conservation of biodiversity and ecologically dependent ecosystems and, wherever possible, the restoration of habitats to a favourable conservation status.	Action towards biodiversity conservation and habitat restoration is linked with increased resilience, particularly in coastal areas.
Action 20	Malta will adopt a national strategy and appropriate contingency plans to deal with this threat posed by alien and invasive species, which could also have significant health and economic implications and beef up its border customs, veterinary, and phytosanitary controls with third countries.	Eradicating alien and invasive species within the park will contribute to climate action.
Action 23	The provision of treated sewage effluent as a cheaper source of water for use by the agriculture community will continue to be studied by the Government given that such a source can act as an economic substitute to the use of ground water.	Use of such water for irrigation purposes in the park will contribute to climate action.
Action 26	The Government will continue to implement incentives schemes directed at the farming and livestock breeding sector to construct or rehabilitate existing reservoirs to capture rainwater for re-use for irrigation and other appropriate uses.	Potential for water reservoirs is to be assessed.
Action 27	The Government will continue to introduce appropriate economic instruments directed at the farming and livestock breeding sector to encourage them to use water more efficiently as well as to use the best-available irrigation technologies.	Scope to evaluate the success or otherwise of fiscal incentives related to agricultural use in the park.
Action 40	The Government shall continue to take all the appropriate action to secure the implementation of the National Flood Relief Plan by the projected 2015 target date.	One of the main discharge points of the NFRP is within the park boundary.
Action 50	The Department of Agriculture will undertake the appropriate study and action to maintain Maltese agro-ecosystems through the management of agricultural landscapes given the central role they play in contributing to overall resilience to climate change.	Protection of agricultural landscape will contribute to climate action.
Action 55	The Department of Agriculture will work with appropriate stakeholders to study and	Potential to assess scope of agriculture in the park as a demonstration project for alternative

	Climate Change Adaptation Action	Relevance to the National Park
	recommend how local breeds and crop varieties together with new species and hybrids could play an important role in agricultural adaptation.	crop varieties.
Action 57	The Department of Agriculture will continue to work with the rural community to encourage them to adopt sound land management practices which are essential for soil conservation and which, together with flexibility regarding land use, will help minimise the impacts of climate change on agricultural soils. The Department should as well encourage them to embark on long-term management strategies that increase soil organic matter, resulting in a soil which has a high nutrient content and strong water-holding capacity, which renders the land better able to cope with future climatic changes.	Scope for good soil conservation measures, with the management plan following actions determined at national level.

4.2.4 Water Catchment Management Plan 2010

The EU Water Framework Directive requires member states to prepare a River Basin Management Plan dealing with groundwater, coastal waters and protected inland surface water management issues with a view to achieving and maintaining good status. Malta adopted its first Water Catchment Management Plan (WCMP) in March 2011, spelling out the steps needed to protect, enhance and improve the water environment of the Maltese Islands.

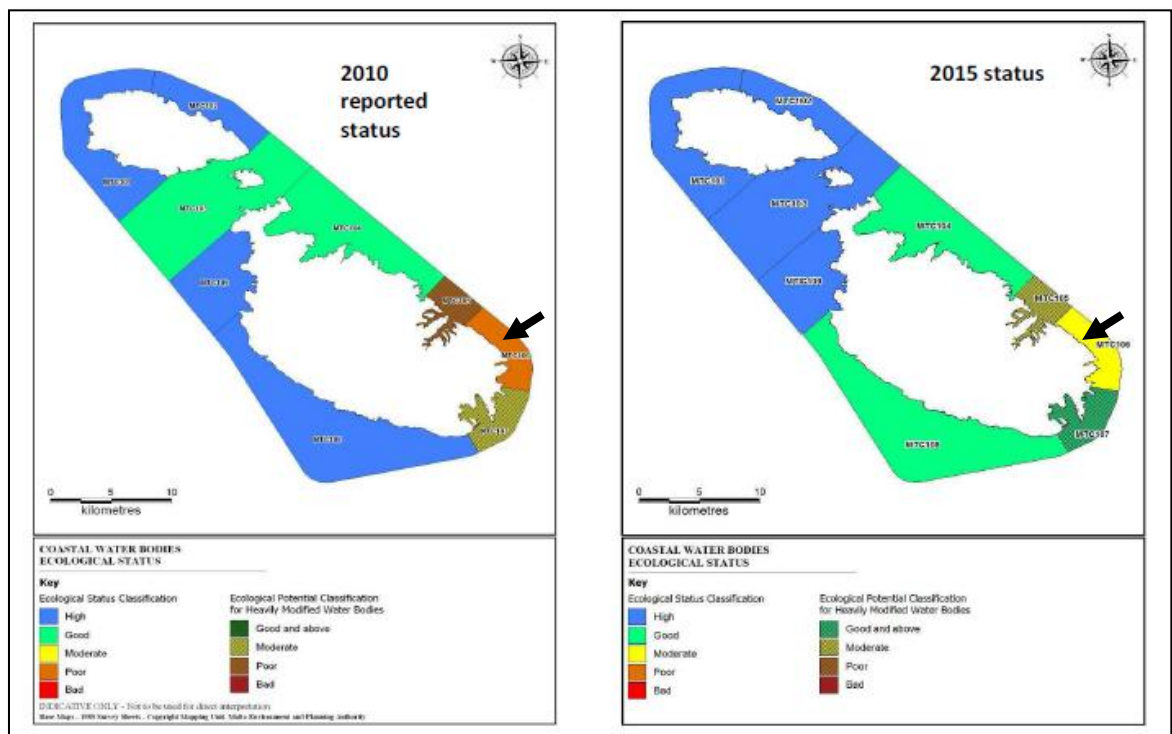


Groundwater Quantitative and Qualitative Status (Source MEPA, MRA 2011)

The park area is found on the south eastern limits of the Mean Sea Level aquifer which spans across mainland Malta. This groundwater body presents widespread evidence of pollution caused by nitrates as well as signs of over-abstraction. Consequently, the first Water Catchment Management Plan considered this groundwater body as having poor qualitative and quantitative status.

Within this plan, the coastal stretch from ix-Xgħajra to Wied il-Għajn is identified as a distinct water body (MTC 106). On the basis of historical data and use primarily linked to the untreated sewage effluent at Wied Għammieq, this water body was identified as having poor ecological status and failing to achieve good chemical status in the first WCMP. Consequently, even though this point source of pollution has since been removed, through the implementation of the new Sewage Treatment Plan at Ta' Barkat, Malta requested a derogation for time to achieve good status by 2021, instead of 2015, due to natural conditions that do not allow for timely improvement in the status of the water body (as per Article 4 4(a) (iii) of the WFD).

Work is underway for the preparation of the next reporting cycle under the Water Framework Directive. Public consultation documents, published by MEPA, show that the data from monitoring undertaken in the period 2011-2013 indicates that the ecological status has improved and is being revised as moderate, though still not achieving good status.



Coastal waters Ecological Status (Source MEPA, MRA 2011 and MEPA 2015)

In terms of chemical status, although mercury has been identified as the only failing parameter for water along all of the coastal water bodies, the conditions at MTC 106 are still considered as poor. The presence of polycyclic aromatic hydrocarbons (PAHs), lead and mercury were also found in the sediment along the three coastal water bodies along the NE coast from Rdum tal-Madonna in Mellieha to Wied il-Għajn. According to consultation documents more information is required to determine the potential role of trans-boundary pollutants.

4.2.5 Strategic Plan for Environment and Development

The spatial framework adopted in the Strategic Plan for Environment and Development (SPED) identifies the area to be managed as a predominantly rural coast fringing the rural area. Map 2A of the SPED identifies the area close to ix-Xgħajra as an Area of High Landscape Protection and the rest of the territory within the park as an Area of Landscape Protection.

The relevant development framework for the spatial characteristics of the area to be managed is guided by the respective thematic and spatial policies of the SPED which essentially call for the support of agriculture and the farming community through diversification, the enjoyment of informal recreation along the coast, within the context of safeguarding the landscape and natural and cultural heritage, and a long term view of enabling economic growth within the context of sustainability. The SPED also recognises the significant role of the coast in increasing the country's resilience to the impacts of climate change.

The policy direction of the SPED introduces a broad spectrum of inter-related aspects that need to be considered. These can assist in the process of developing a vision for the park. The relevant SPED policies that would guide decision making for development and environmental permitting for this area are listed in Table 7 below.

Table 7 SPED Policies guiding the development framework of the National Park

SPED Reference	Policy text	Relevance to the National Park
RO 1.1	To facilitate sustainable rural development and the diversification of activities within the Rural Area to sustain agriculture and safeguard its distinctiveness by protecting good quality agricultural land from development.	Supports protection of agricultural land and the continuation of agricultural activities.
RO 1.7	To facilitate sustainable rural development and the diversification of activities within the Rural Area to sustain agriculture and safeguard its distinctiveness by controlling the cumulative effect of rural development.	Focuses on the need to consider the overall capacity of an area since cumulative impacts may degrade the distinctive quality of the rural area (in terms of landscape; openness and tranquillity; environmental quality e.g. noise).
RO 2.1	To ensure that existing rural recreational resources are protected, enhanced and accessible and to facilitate the provision of new recreational facilities which enhance the public's rural experience in a manner which does not have an unacceptable adverse impact on protected areas, species and areas of high landscape sensitivity by Identifying and managing key rural areas popular for informal recreation which enhances the rural experience, improving synergies between biodiversity and tourism, and protecting them from deleterious and incompatible uses.	Supports appreciation of the rural environment through informal recreation for both locals and tourists.
RO 2.4	To ensure that existing rural recreational resources are protected, enhanced and accessible and to facilitate the provision of new recreational facilities which enhance the public's rural experience in a manner which does	Safeguards public access through appropriate visitor management.

SPED Reference	Policy text	Relevance to the National Park
	not have an unacceptable adverse impact on protected areas, species and areas of high landscape sensitivity by ensuring public access to rural areas whilst minimising negative impacts, particularly from vehicular access on protected areas and areas of high landscape sensitivity.	
RO 2.5	To ensure that existing rural recreational resources are protected, enhanced and accessible and to facilitate the provision of new recreational facilities which enhance the public's rural experience in a manner which does not have an unacceptable adverse impact on protected areas, species and areas of high landscape sensitivity by ensuring compatibility between recreational activities and between these activities and other land uses.	Acknowledges the need to respect existing legitimate uses within the rural area and safeguard them against displacement and conflict from recreational activities, especially ensuring visitor access is managed to avoid conflicts with agriculture.
RO 4.1	To protect and enhance the positive qualities of the landscape and the traditional components of the rural landscape by promoting integrated countryside management.	The management of the park can act as a demonstration project for integrated countryside management, involving a broad spectrum of stakeholders and implementing regulations.
RO 4.5	To protect and enhance the positive qualities of the landscape and the traditional components of the rural landscape by encouraging the reuse of existing structures worthy of conservation, in a manner which is compatible with the rural character and prevents formalisation of the countryside.	Scope of enabling sustainable use of identified structures within the park.
CO 1.1b	To prioritise uses that necessitate a location on the coastal zone and marine area in a manner which minimises user conflicts, does not accelerate coastal erosion, protects biodiversity, cultural heritage, landscapes and visual access to them, public access and use and increases resilience to climate change impacts by designating a predominantly terrestrial rural coast to encourage the continuation of traditional agricultural uses where predominant and public access for informal recreation, to restrain mineral extraction from extending towards the coastline and improve small scale beach facilities. The rural coast may also accommodate legitimate coastal uses of strategic importance which may be incompatible with urban coastal uses and where no alternative locations on the designated urban coast exist.	Provides a long term management framework and, by linking land and sea, allows opportunities for new maritime activities within the scope of the park.
CO 3.3	To ensure that existing coastal recreational resources are protected, enhanced and accessible and to facilitate the provision of new recreational facilities which do not restrict or interfere with physical and visual public access of the coast in a manner which does not have an unacceptable adverse impact on protected areas, species and areas of high landscape sensitivity by protecting and encouraging informal recreational facilities on the terrestrial rural coast.	Promotes informal recreation.
CO 3.4	To ensure that existing coastal recreational resources	Safeguards specific coastal uses against

SPED Reference	Policy text	Relevance to the National Park
	are protected, enhanced and accessible and to facilitate the provision of new recreational facilities which do not restrict or interfere with physical and visual public access of the coast in a manner which does not have an unacceptable adverse impact on protected areas, species and areas of high landscape sensitivity by protecting designated beaches and swimming zones and identified diving sites from conflicting uses.	displacement by other activities, thus promoting further opportunities for public enjoyment of the site.
TO 8.2	To safeguard and enhance biodiversity, cultural heritage, geology and geomorphology by safeguarding protected areas including SACs, SPAs and MPAs, whilst enabling activities aimed at enhancing their management objectives.	Directing acceptable activities to ensure compatibility with protection of natural and cultural heritage.
TO 8.3	To safeguard and enhance biodiversity, cultural heritage, geology and geomorphology by strengthening the links within the ecological network of the Maltese Islands.	Avoiding showcase conservation and providing a national context and objective to the scope of protection.
TO 8.4	To safeguard and enhance biodiversity, cultural heritage, geology and geomorphology by facilitating restoration of damaged ecosystems.	Promotes the restoration of damaged ecosystems.
TO 8.7	To safeguard and enhance biodiversity, cultural heritage, geology and geomorphology by controlling activities which might have an impact on areas, buildings, structures, sites, spaces and species with a general presumption against the demolition of scheduled and vernacular buildings.	Safeguards against activities that are incompatible with protected natural and cultural heritage.
TO 8.9	To safeguard and enhance biodiversity, cultural heritage, geology and geomorphology by controlling sources of light pollution which negatively affect the Rural Area.	Protection against light pollution.

4.2.6 South Malta Local Plan

The land use policy framework for the area to be managed as a national park is outlined in the South Malta Local Plan of 2006 through five specific policies. The area between Blata l-Bajda in ix-Xgħajra and Żonqor Point in Marsaskala is recommended for protection as a Scheduled Area of Ecological Importance and Site of Scientific importance (Policy SMCO 03) where there is a general presumption against development that would have negative impacts on the area/site.

The same area is also designated as an Area of High Landscape Value (Policy SMCO 06) with a strong presumption against the building of new structures and light pollution. Compatible and sensitive positive interventions and activities, that are intended to upgrade and rehabilitate the Area of High Landscape Value, are encouraged, particularly informal recreational activities. The same policy calls for the rehabilitation of sites degraded by development activities, and the establishment of a monitoring programme.

The South Malta Local Plan policy SMIA 13 identifies the site as a National Park for informal recreation and the appreciation of ecological, geological, archaeological and cultural historical features. The

primary aim of the park according to the policy is conservation, protection and improvement of existing natural and cultural heritage. The policy calls for the preparation of a management plan that should consider limited commercial development related to visitor management and compatible with the aims identified for the park. Policy SMZA 06 specifically calls for the rehabilitation of Fort St Leonard to encourage tourism-related uses that respect the heritage value of the building while Policy SMAG 01 safeguards agricultural land from inappropriate development.

Currently the site is not afforded any legal protection for its natural or landscape characteristics. While SMLP 2006 calls for parts of the area to be designated as an AHLV and AEI/SSI, the scheduling process is governed by EDPA 2010 and the respective procedures to bring these policies into effect have yet to be undertaken.

While specific policies are identified in the SMLP of 2006, the spatial planning framework is to be seen holistically, within a hierarchy where the strategic framework of the SPED prevails and additional detailed policy guidance that have been approved since 2006 would also be applicable.

The extensive set of legislation covering various parameters from nature protection to the regulation of specific activities, together with the complementary regulatory and administrative set-up, provides a supportive framework for the establishment and management of the National Park. This requires effective and continuous monitoring of regulatory compliance.

The policy framework provides for synergies in actions that can be taken, from land use decisions to fiscal incentives as well as type and scale of activities that can be developed.

Synergies exist between biodiversity protection, adaptation to climate change, sustainable agriculture, informal recreation, cultural heritage protection and landscape protection.

5 National Parks and area management in the Maltese Islands

The purpose of national parks and area management in the Maltese Islands range from the social aspects such as tourism and local recreational/ leisure to addressing environmental related issues, especially conservation.

It is usually the case that areas being managed for their conservation importance are also managed for their recreational aspect. Such sites are mainly those which have been designated as Special Areas of Conservation at an EU level and which form part of the EU NATURA 2000 network, such as Għajn Tuffieħa; Ramla l-Ħamra; s-Simar; Għadira; Buskett, Salina and Il-Park tal-Majjistral. Malta is currently in the process of adopting management plans for other sites as part of the Natura 2000. In addition, there are other sites of ecological importance at a national level for which management is being provided, such as Wied Għolliet and Xrobb il-Għagin.

Historically, there has been an 'ad-hoc' approach. Environmental NGOs made representations and management was then delegated by Government, as the land owner, to the respective NGOs through management agreements as indicated in Table 8 below.

Table 8 Areas managed by Non Governmental Organisations

Site	NGO
Għajn Tuffieħa	Gaia Foundation
Ramla l-Ħamra	Gaia Foundation
S- Simar	Birdlife Malta
L- Għadira	Birdlife Malta
Xrobb l-Għagin	Nature Trust Malta
Wied Għolliet	Nature Trust Malta
Park tal-Majjistral	Management Organisation (Nature Trust Malta; Din l-Art Helewa; Gaia Foundation)

Agreements for these sites are tri-partite between the respective NGO as site manager, the Ministry responsible for the Environment, which funds management, and MEPA which is responsible for overseeing the technical aspects of the agreed annual work plan. The current annual allocation for the management of these sites and others within the remit of the Ministry for the Environment amounts to EUR 180,000. In the case of an approved management plan, funds are usually disbursed following the submission of deliverables by the NGOs in accordance with the annual agreed work plan.

The other managed areas, which are not considered as ecologically sensitive, are usually managed primarily for their recreational potential. Examples of these are Ta' Qali National Park, Marsaskala Family Park and Salini National Park. These are managed by the P.A.R.K.S. Department within the Ministry for Sustainable Development, the Environment and Climate Change.

Considering EU obligations and limited resources, the management of ecologically sensitive sites needs to be transformed from a demand-driven approach to one focused on the potential of each respective site, with its particular characteristics/issues given priority.

For government-owned land there are a number of options for area management, depending on the level of intervention required, site characteristics and objectives. The following are the three management structures currently in place:

1. **Government-led action:** Government provides all the required resources and a specific government department or entity takes charge. The capital requirement of this approach is resource intensive and the same resources need to be deployed to other duties. Self-financing opportunities are regulated by government administrative policies. (e.g. Ta' Qali).
2. **Delegation to a NGO:** Government dedicates financial resources to a third party and sets specific objectives. This provides for self-financing opportunities through the NGO operating as a distinct entity from Government. However, in view of the voluntary operations of the NGO, and limited funding, it is not always possible to implement the necessary measures.
3. **Management Board:** An example of this is the Majjistral Nature and History Park Management Board, constituted by NGOs, government representatives and local councils. This Board develops a management plan with the approval of the competent authority while implementation is the responsibility of the managing organisation represented by the park manager. This structure is dependent on financial support from Government.

Given past experience, and the increasing number of conservation sites, other options, such as delegation to an ad-hoc site manager in the private sector or in partnership with another entity, should be considered. This implies complete outsourcing of area management; there would still be contractual obligations linked to the objectives of the site but the opportunities for self-financing would be greater. This approach is deemed challenging and economic performance may tip the balance. It would be dependent on an effective regulatory system.

Experience has shown that sites are managed best when there is an administrative structure in place, preferably with a functioning management board made-up of members from different entities and a variety of backgrounds. This approach enables shared decision-making and respective responsibilities are clear.

6 SWOT analysis

An analysis of strengths, weaknesses, opportunities and threats (SWOT) for the management of the site as a National Park has been carried out after identifying issues linked to the site characteristics (Section 3) and the regulatory and policy framework (Section 4). The SWOT analysis helped to develop the vision and identify the main objectives (Section 7) for the park.

Table 9 SWOT

Strengths	Weaknesses
- Government commitment to establish the park - Strong legal and policy framework (resource use and environment protection) - Considerable extent and quality of cultural and natural heritage present - Presence of active farming community - Increased awareness of the site at a national level - Site is easily accessible - More than two decades of national experience in area management - National experience in historical buildings / structures restoration - Coastal location; strategic location (situated between the Grand Harbour and Marsaskala Harbour); high landscape quality - Contiguous with other coastal and rural areas of cultural and natural value	- Lack of awareness of cultural and natural resources value - Lack of skills in farming community to take up relevant funds - Lack of information on the extent of costs required for restoration works in natural and cultural heritage - Years of neglect and stigma - Animal husbandry farm at Fort San Leonardo - Not recognised as an official bathing site
Opportunities	Threats
- EU and international funds for 2014-2020 - Improve sense of identity for local communities (ix-Xgħajra, Haż-Żabbar and Wied il-Għajn) - Increase awareness of cultural and natural heritage in this part of Malta - Provide a healthy environment for informal recreation in south-eastern Malta - Rehabilitation of a degraded site - Demonstrate good practice in environmental stewardship - Long term potential to link the operations of infrastructure in the area - Sensitive restoration and use of historical structures - Sensitive re-use of San Leonardo - Development of niche markets - Better co-ordinated action with the support of a management body - Walking and cycling between Grand Harbour area and south east coast - Diversification of sustainable activities related to coastal and marine environments	- Weak enforcement of legislation nationally - Illegal dumping and fly tipping - Negative impacts from existing infrastructural projects - Uncontrolled access - Pressure for urbanisation - Pressure of development - Coastal erosion - High percentage of private ownership - Conflicting and incompatible uses and demands - Invasive alien species - Sedentary population - Light and noise pollution - Negative public perceptions - Requires substantial financial and human resources

7 Vision

Whereas the number of protected areas in the Maltese Islands is noteworthy, the objectives behind their designation vary. The majority have been triggered by legislation seeking the protection of areas with habitats and species considered of importance, at national, European and at times global level. The protection of biodiversity has featured in all these initiatives. Some of these protected areas also incorporate elements of cultural heritage and Il-Majjistral Park was designated as a National and Cultural Heritage Park in recognition of this interrelationship.

The 2015 Government statement for the area views this park as an area where local communities will have space to appreciate and safeguard the natural environment. Until now there has been limited attention to the contribution of a natural park to the well being of residents in the vicinity. In fact, the South Malta Local Plan 2006 recommended this proposed park be used for tourism and recreational purposes. And, elsewhere, the provision of interpretation facilities, with small scale catering uses, has been a priority.

The park is endowed with natural, cultural, and recreational resources. Its natural setting provides tremendous opportunities for refuge, recreation, exploration, learning, and reflection for locals and tourists alike. The potential of this Park to serve all these functions lies within its distinct quality of being relatively undeveloped, and the knowledge that dereliction of the countryside can be reversed through sensitive restoration.

Having regard to the characteristics of the area, and recognising it stretches between different communities, it is being proposed to call the park “*Il-Park Nazzjonali tal-Inwadar*” after the prominent location known as *In-Nwadar*, close to Fort St. Leonard. In Maltese, this is the plural of the word “*nadur*”, meaning “a place where one can clearly observe the surroundings around and below.” The ability to descend from a height to sea level, with uninterrupted coastal access and views, gave the placename added significance.

A vision for the park is being outlined. It takes into account national objectives and policy direction, the need for open space as an alternative to urban recreational areas, the need to support and enhance agricultural activity and the desire for continuous community involvement in appreciating natural and cultural heritage for our well being and long term sustainable development. This is the vision:

“Il-Park Nazzjonali tal-Inwadar huwa ħolqa li żżewweġ il-wirt naturali u kulturali ma’ mkejjien ta’ ħidmet il-bidwi u n-nies tal-inħawi, fejn il-beraħ joffri għajn ta’ kenn, serħan u għarfien f’katina waħda mal-madwar.”

This vision of bringing together the farming community and local residents with the natural and cultural heritage in a mosaic where open space provides a sanctuary of tranquillity, a source of knowledge and a continuous link with the surrounding landscape sums up the importance being given to the area.

The establishment of *Il-Park Nazzjonali tal-Inwadar* will provide a model for resource management where recreation opportunities and heritage protection are carefully balanced. The vision proposed for the Park is one where the natural environment, the rural and coastal landscape and its cultural assets

are recognised as integral components for the overall well-being of local residents and the socio-economic performance of the surrounding communities.

8 Objectives and Priority Actions

8.1 Objectives of the Park

On the basis of the stocktake and SWOT analysis, a set of objectives have been drawn up for establishing and implementing the vision of *Il-Park Nazzjonali tal-Inwadar*. It is a comprehensive approach to facilitate a greater awareness and understanding of the inter-relationships that exist between natural environment, history and cultural identity and their role in promoting healthy communities and alternative, sustainable economic practices.

The park's success is dependent on the full engagement of the local community and effective management.

- | | |
|--------------------|---|
| Objective 1 | To value our environment in its natural form |
| Objective 2 | To be a model of environmental regeneration |
| Objective 3 | To raise consciousness of: <ul style="list-style-type: none">- the conservation of natural and cultural heritage;- informal recreation to experience the rural landscape;- the stewardship required to foster co-existence as part of a chain |
| Objective 4 | To promote natural areas as sources for economic growth |
| Objective 5 | To make it a valued need that empowers the community and enhances social wellbeing |
| Objective 6 | To act as a catalyst to boost existing businesses and endeavours nearby |

Through these objectives, farming within the park will not only be supported but its role in environmental stewardship will gain visibility, and visitors will be able to partake in informal activities compatible with the natural environment or enjoy solitude and quiet reflection.

8.2 Priority Actions

Priority actions are crucial if the objectives are to be achieved. This priority list was extracted from a longer and broader list of potential actions. Annex A provides the additional list of actions that may be considered further during the Management Plan formulation process.

The intention is to preserve the cultural landscape through sustainable use, to create attractive recreation opportunities in harmony with nature, to enable natural and cultural attractions to be experienced, to improve the quality of life in the south of Malta, and increase awareness of nature conservation and sustainable development. This can only be done through protecting the rural and relatively non-urbanised character of the Park.

Table 10 below presents the respective actions, and suggested time frames for their commencement. Actions started in the short-term may turn out to be ongoing and, therefore, serve a long term purpose. The time frames considered are: short term (ST) to commence within 2 years; medium term (MT) to commence from 2-5 years and long-term (LT) to be implemented by 10-15 years of the adoption of this brief.

For this initial phase, priority actions have been identified for the purpose of (i) engaging the local community and stakeholders from the start, (ii) halting activities that impact negatively and (iii) establishing baseline information for the long term management of the natural and cultural assets of the park.

Discussions have begun which potentially could be synergistic with the objectives of the park and beneficial to its users. They involve representatives of the farming community, Water Services Corporation and WasteServ Ltd, who are considering how agricultural land could be served with polished water for irrigation. Other potential synergies include using organic waste collection and composting.

The Management Plan will incorporate a review process and performance indicators to enable periodic updates.

Table 10 List of priority actions

Objective	Action		ST	MT	LT
1	1	Commission baseline studies on the cultural and natural assets of the park area and its surroundings with a view to developing a monitoring programme.	✓		
	2	Develop an awareness programme on the natural features and ecosystems services they provide and the role of the landscape as an asset to the Maltese identity.	✓		
2	3	Implement the systematic and gradual removal of illegal dumping material.	✓		
	4	Establish focal security points to minimise negative impact on park area.	✓		
	5	Scientific removal by method statement of alien species from the park's natural public areas.		✓	
	6	Restore the country and rural pathways, and the dry stone-walls.		✓	
	7	Restore cultural and military heritage assets.			✓
	8	Encourage farmers to plant indigenous trees and shrubs in lieu of alien toxic trees and alien trees that impact negatively on respiratory health.			✓
	9	Encourage the use of green infrastructure.		✓	
	10	Encourage the re-introduction of endemic and indigenous flora and fauna.			✓
	11	Develop an academic research programme for projects with various institutions for the further study of the park.		✓	
	12	Organise a series of open day activities.	✓		
3	13	Develop a programme of transformative education for sustainable development and the environment's role to attain skills for the present day challenges for all levels of society.		✓	
	14	Liaise with relevant authorities for the monitored introduction of the concept of community archaeology in Malta through a pilot project within the park.		✓	
	15	Design and develop an interpretation scheme for the park and its periphery.		✓	
	16	Develop a scheme for potential corporate social responsibility projects to be implemented by the wider business community.			✓
4	17	Promote the ecotourism niche to complement initiatives within the park and its environs.		✓	
	18	Develop a branding concept for the park.	✓		
	19	Encourage the formation of community enterprises and co-operatives within the local community (including the farmers).		✓	
	20	Explore the viability of alternative indigenous crops.		✓	
	21	Encourage the setting-up of twinning projects between local councils in the surroundings of the park and municipalities in other EU countries.			✓
5	22	Investigate how young people could be trained in skills required for the park.		✓	
	23	Encourage networking between the park management and the community.	✓		
	24	Empower park management to participate in consultation processes on initiatives that will have a bearing on the Park.		✓	
	25	Liaise with the Xlokk Local Action Group to extend current initiatives to this area.		✓	

Objective	Action		ST	MT	LT
6	26	Assist in the promotion of the production and diversification of local produce, their branding and marketing and explore the possibility of a local market.		✓	
	27	Promote the park as a platform for academic studies and R&D.		✓	
	28	Support pilot projects that encourage eco-effective entrepreneurship and create-ability.			✓

ST = Short Term
MT = Medium Term
LT = Long Term

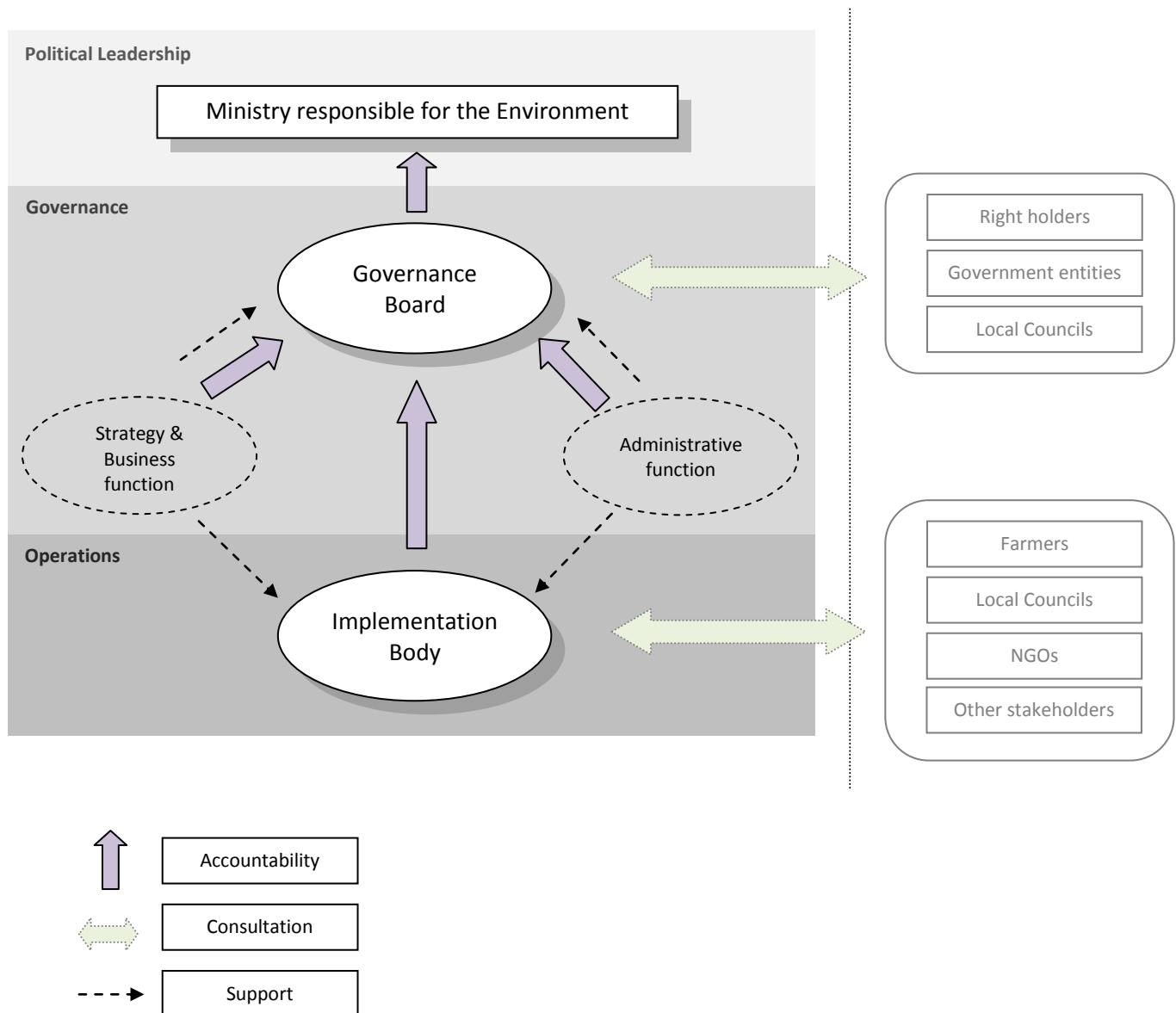
9 Governance

It is essential that the roles and responsibilities for the management of *Il-Park Nazzjonali tal-Inwadar* are clearly defined. The scope of the structure as proposed below is to ensure engagement of stakeholders at the appropriate stages, whereas the role of overall decision making and responsibility for the park's long term success should be established through a Governance Board that shall be legally established with executive powers and be directly answerable to the Minister responsible for the Environment. In proposing this model the Committee has taken into consideration the current difficulties encountered by the various existing structures involved in the management of parks and protected areas. The Committee also acknowledges that any set up adopted should be dynamic to react to particular situations on the ground and be able to achieve the best results.

The Governance Board shall engage any ministries, departments and directorates that have a remit on this Park. The actions to be taken in pursuit of the objectives and the means to achieve them on a day-to-day basis are the remit of a separate dedicated Implementation Body. The Governance Board shall have allocated the required funds according to the business plan as prepared and adopted and shall have the capacity and the resources to secure the implementation of the Management Plan.

The Park is expected to be managed in cooperation with the local community through open communication on important issues such as public access and safety, natural and cultural resource management and provide opportunity for active engagement in the implementation of initiatives in line with the approved Management Plan.

The concept of environmental stewardship together with the rights holders and stakeholders can be integrated within the management of the park through consultation processes and direct involvement in the identification and implementation of specific management actions. The proposed model has the potential of wider participation from all interested parties including any volunteers, Voluntary Organisations and the private sector in implementing actions for the management of the Park.



9.1 Governance Board

9.1.1 Composition

The Board shall have an executive role and shall be composed of:

- Chairperson
- 1 person appointed on the basis of knowledge in marketing and business management
- 1 person appointed on the basis of knowledge and experience in environmental heritage management
- 1 persons appointed on the basis of knowledge and experience in rural development/agriculture issues
- 1 person appointed on the basis of knowledge and experience in cultural heritage management.

The above persons will be appointed by the Minister responsible for the Environment.

Preferably there should be a mix of independent and senior public officials delegated with decision making.

9.1.2 Accountability

- Responds to Minister responsible for the Environment
- Duty to consult with rights holders of the Park in the decision to be taken where these affect their property
- Duty to consult with Local Councils in decisions taken that affect the respective communities
- Duty to ascertain financial accountability and good governance.

9.2 Implementation Body

9.2.1 Composition

The Implementation Body shall be composed of:

- A Park Manager who will lead the Implementation Body
- An Education Officer, responsible for environmental literacy program/initiatives
- A Scientific Officer, responsible for environmental monitoring programs.

This body shall be supported with the necessary equipment and resources.

Possible involvement of individual volunteers and voluntary organizations shall be encouraged.

9.2.2 Accountability

- Responds to the Governance Board. Quarterly progress meetings with Governance Board on Management Plan implementation shall be held
- Duty to engage with right holders and stakeholders.

9.3 Roles and Responsibilities

The roles and responsibilities of the Governance Board and the Implementation Body are outlined below. The 'Strategy & Business' and 'Administrative' functions, reporting to the Governance, will also support the 'Implementation Body'.

Governance Board	
• Establish strategy and objectives of the Management Plan • Approve and monitor Management Plan • Approve and monitor Business Plan • Networking and co-ordination with rights holders and stakeholders • Networking and co-ordination with Government entities • Administer the Implementation Body	
Strategy & Business function	Administrative function
Formulate the Management Plan, on the parameters set by the Governance Board, and the Business Plan. This function shall also provide for the formulation of the specific projects addressing the actions of the Management Plan, including any necessary authorisations.	Offer the required administrative support to both the Governance Board and Implementation Body, including customer service, HR, finance & procurement and records management. It will also fulfil legal administrative obligations, including audited accounts and annual reports.
Implementation Body	
• To ascertain that any works carried out are in line with the approved Management Plan and follow best practices • To implement the approved management plan • To implement the approved annual business plan • To involve individual volunteers and voluntary organisations to assist in the implementation of the Management Plan • To co-ordinate actions with implementation partners, government departments and agencies • To operate and maintain the park's assets which are in the remit of the Implementation Body • To monitor progress and recommend changes/improvements to the Management Plan and the Business Plan	

10 Recommendations and Way Forward

This final section presents the next steps towards establishing *Il-Park Nazzjonali tal-Inwadar* and its management. In order of priority, the sequence enables a course of action that will see successive tangible results once this document has been put forward for public consultation and approved.

10.1 Recommendations

10.1.1 Boundary extension

The boundary of the park as proposed in the 2006 South Malta Local Plan (approximate land area of 0.929 km² / 929,000 m²) was based on a framework that earmarked the site for conservation, protection and improvement of existing natural and cultural heritage. It also considered limited commercial development, related to visitor management of Fort St Leonardo. The shore was considered to be protected as an AEI and SSI, beyond the confines of the proposed park.

The extent, as proposed in 2006, is contained and distinct from the adjacent site, but it would be preferable to incorporate the shoreline from the proximity of il-Blata l-Bajda at ix-Xgħajra to Iż-Żonqor, within the park's boundary. Such extensions would ensure greater synergy with actions taken by the adjacent existing and planned uses, with the overall objectives of the park, particularly in relation to public access, as well as safeguarding the integrity of the geological/geomorphological and ecological value of the shore.

The land area transferred for the development of the American University of Malta, as per the Parliamentary Resolution of 16th December 2015, is proposed for exclusion from the park's confines.

A change in the boundary as identified in the 2006 South Malta Local Plan (approximate land area of 0.973 km² / 973,000 m²), is being proposed, as per Map 8, with a view to harmonise and focus the scope of the Park's characteristics, namely the protection of the natural and cultural heritage and the open rural landscape. This is an increase of 44,000 m², out of which 30,000 m² is within development zone. As a result, the size and extent of the Park are consistent with its vision of resource protection, compatible uses, and connectivity with areas providing similar uses.

In forthcoming discussions on the development application of the American University of Malta, at Marsaskala, due attention should be given to safeguarding access along the coast to the park from the Żonqor area to avoid further take-up of the undeveloped shore. The nature and scale of the development must result in a harmonious landscape, benefiting the visual integrity of the park from land and sea.

In line with the SPED, it is proposed that while the park's boundaries remain terrestrial, the implementation of the park's objectives should seek to address the marine component of the coast wherever possible, with a long term view to subsuming the seaward part of the site.

Map 8 – Proposed Boundary



10.1.2 Legal notice

The declaration of the Inwadar Natural Park requires legal backing. It is recommended that a Legal Notice is issued under the relevant Act that declares the status of the Park and defines its boundary, vision, objectives and governance.

10.1.3 Set up governance

The establishment of the Governance Board will follow the adoption of the Legal Notice declaring *Il-Park Nazzjonali tal-Inwadar*. Such a step will signify a determination to see the transition of this area from one of neglect and dereliction to an attractive place of recreation, backed by sustainable resource management practices.

10.1.4 Implementation of short term actions

The success of *Il-Park Nazzjonali tal-Inwadar* depends on actions taken in the early stages. Priorities should be (i) the engagement of local communities; (ii) co-operating with the local agriculture community, particularly aiding capacity to tap EU funds, and (iii) action to halt illegal dumping. The sensitive rehabilitation of the existing track is also important. Such actions can be undertaken in parallel with the Management Plan formulation process.

10.1.5 The preparation of the management plan and its funding

The next action being recommended is the drawing up of a Management Plan, guided by the Vision, Objectives and Priority Actions outlined in this Brief. It will determine timelines and propose a business plan for at least 3 years, highlighting the resources required, particularly funding. The Management Plan shall be reviewed periodically.

Given that most of the Park area is agricultural, there is significant potential for the farmers, as stakeholders, as well as the Management Body to benefit from the European Agricultural Fund for Rural Development (EAFRD) 2014-2020. Other funding programmes such as LIFE + should also be explored, together with the partnership opportunities with relevant stakeholders such as local councils and NGOs.

10.2 Conclusion

The Vision and Objectives for *Il-Park Nazzjonali tal-Inwadar* are ambitious in their attempt to mainstream nature protection and cultural heritage conservation, enhance agricultural practices and promote innovative economic models. In departing from the NGO-led model of area management there is an opportunity to explore other ways of stakeholder engagement. The dereliction and neglect of the area can be ended by a Government commitment to empower local communities and stakeholders. Environmental stewardship benefits all citizens and should be the duty of all citizens. Continuous active engagement by residents, the farming community and other stakeholders will guarantee a bright future for the park.

Bibliography

Axiak, V. (2011) *Water Quality along the Xgħajra coastline over the period 31st August 2011 and 20th October 2011*

Bornni-Feyerabend et al (2013) *Governance of Protected Areas: From understanding to action. Best Practice Protected Areas Guidelines Series no.20*, Gland Switzerland, IUCN.xvi + 124pp.

Farrugia, M. (1996) *Survey of Defence Heritage Xgħajra Locality, Malta.*

Geological & Geological Services (2006) *Geological Report for the conservation of Xgħajra coast, Malta. For and on behalf of Xgħajra Local Council*

MEPA (2003) *Rural Strategy Topic Paper*

MEPA (2002) *Coastal Strategy Topic Paper*

MEPA (2004) *Landscape Subject Plan*. Draft issued for public consultation

MEPA (2015) *Characterisation of Surface Waters*. Consultation document for the second Water Catchment Management Plan

Malta University Services (2000) *South Malta Local Plan Survey of Ecological Resources*.

National Independent Forum for Sustainability (NIFS) (2015) *San Anard, San Niklaw and Bidni Rural Landscape Area. Proposed Agriculture-Ecology Landscape Area for the Southeast of Malta*.

Scott Wilson (2007) *Detailed Investigations and Feasibility Studies on Land Reclamation at Two Indicated Search Areas – Technical Report Volume 1 and Appendix 1*

Trzyna, T. (2014) *Urban Protected Areas: Profiles and best practice guidelines. Best Practice Protected Areas Guidelines Series no.22*, Gland Switzerland, IUCN.xiv +110pp.

Xerri, S. (2000) *Survey of Geological & Hydrological Resources of the South Malta Local Plan*

<http://www.maltawildplants.com> (accessed on 13.10.2015)

<http://www.birdinginmalta.com/birdspecies2.htm> (accessed on 08.01.2016)

<http://www.parlament.mt/paperslaiddetails?id=25604&legcat=13> (accessed on 08.01.2016)

Annex A: Detailed Actions

This Annex provides a list of actions that may be considered further during the Management Plan formulation process. These actions are listed according to the objectives identified within this document.

The following are detailed/specific actions that could enhance *Il-Park Nazzjonali tal-Inwadar* experience:

Objective 1: To value our environment in its natural form.

- i. Promote appreciation of night sky heritage.
- ii. Show through rambling and/or fixed exhibition:
 - the landscape value of agricultural land
 - the ecosystems inherent in dry-stone walls
 - how large tracts of agricultural and natural landscapes play a role in climate change mitigation by carbon sequestration and decreasing the heat island effect.
 - how the coastal strip between Żonqor Point and Xgħajra is an area of ecological and biological conservation value.
 - how the flora and fauna within the park are assets to the Maltese identity and should be prized.
 - how the coastal area is of scientific importance from geological and geo-morphological perspectives, highlighting the coastal karst landscape and several classic text book geomorphological features, such as fully formed and collapsed dolines, wave cut platforms, paleo infills in tectonic rock discontinuities and sagging sea caves.
- iii. Show through a limited yearly number of monitored cultural boat trips (with the departure point outside the park area):
 - how the Swali Caves are a magnificent network of caverns and potential breeding areas of Cory's shearwaters and other sea birds.
 - how the nearby reefs are breeding grounds for pelagic fish.

Objective 2: To use the park as a model of environmental regeneration.

- iv. Restore within the Park:
 - Entrenchment wall;
 - Coastal tower at Triq il-Wiesgħa in Xgħajra (the De Redin Coastal Tower);
 - WWII warplane crash site;
 - Fort San Leonardo;
 - Possible Roman Feature (Cistern);
 - Wartime Beach Defences and Reserve Lines.
- v. Restore in the surrounding area:
 - Convent of San Leonardo;
 - Estates of the Baroness' House;
 - Chapel to St Leonard;
 - Wayside Shrine of 3 Crosses;
 - Kappella tal-Madonna tad-Dawl;

- Kappella ta' Sant'Antnin ta' Padova;
- Kappella ta' San Nikola;
- Dolmen and megalithic remains;
- Circular field called iċ-Ċirku;
- Fort St. Rocco;
- Delle Grazie Battery at ix-Xgħajra;
- 2 Heavy Anti-Aircraft Batteries.

Objective 3: To raise consciousness within society for the appreciation of the:

- **conservation of the elements of our natural and cultural heritage**
 - **alternatives of informal ways of recreation for all to experience the rural landscape**
 - **stewardship required to foster co-existence as part of a chain**
- vi. Create walking trails on the coastal strip between Żonqor Point and Xgħajra to show the substantial geological, ecological and biological conservation value of the area.
 - vii. Propose Heritage trails from within the park to its surrounding environs, including:
 - a. from *Il-Park Nazzjonali tal-Inwadar* to Magħluq tal-Baħar, via Inwieġel, Bidni and Wied Sant'Antnin
 - b. from *Il-Park Nazzjonali tal-Inwadar* to Xrobb l-Għaġin, via Bajja ta' San Tumas, l-Għassa tal-Munxar and Delimara
 - c. from *Il-Park Nazzjonali tal-Inwadar* to the Three Cities, via ix-Xgħajra and Kalkara
 - d. from *Il-Park Nazzjonali tal-Inwadar* to il-Foss, via Bidni and Santwarju tal-Madonna tal-Grazzja
 - e. from *Il-Park Nazzjonali tal-Inwadar* to Knisja ta' San Girgor, via Wied Sant'Antnin, Torri Mamo, Misraħ Strejnu and Ġnien il-Kmandant Luqa Briffa.
 - viii. Promote the Blue Hole (a marine geological feature), the Swali Caves, the San Anard and Munxar reefs, and the shipwrecks (including HMS Southwald and "Le Polynesian").
 - ix. Create seasonal walking trails through the fields and the farms to:
 - show the landscape value.
 - show their economic benefit.
 - x. Organise seasonal hands-on sessions to show the park activities.
 - xi. Organise excursions and practical sessions in farmland within the park and its surroundings.
 - xii. Promote workshops to study the land and ocean landscape.
 - xiii. Organise photography events.
 - xiv. Organise open air painting and drawing sessions.
 - xv. Create walking trails within *Il-Park Nazzjonali tal-Inwadar* that continue into the hinterland (Inwieġel and Bidni) and along the coast both towards Munxar and the Three Cities.
 - xvi. Create cycling paths within *Il-Park Nazzjonali tal-Inwadar* that continue into the hinterland (Inwieġel and Bidni) and along the coast both towards Munxar and the Three Cities.
 - xvii. Create an area of tranquillity and darkness for Full Moon gatherings, yoga sessions, candle light sessions, group relaxation exercises, dark sky heritage appreciation.
 - xviii. Create sites for bird-watching activities.
 - xix. Explore the organisation of choir concerts in the small chapels of the area .
 - xx. Organise story-telling sessions for the residents of the surrounding communities and their children to renew the collective and indigenous memories of events over generations.
 - xxi. Promote the nearby reefs as breeding grounds for pelagic fish.

- xxii. Explore horse riding.
- xxiii. Create information brokerage across the Park.
- xxiv. Identify zones for visiting centre(s) within the Park or periphery.
- xxv. Identify viewing points that highlight areas of outstanding natural beauty.
- xxvi. Propose reading area(s) within the Park.
- xxvii. Create environmentally responsible access to the coast for swimming purposes.
- xxviii. Create environmentally responsible access to the coast for fishing purposes.
- xxix. Organise activities and actions within the Park and its environs that change the mindset from protection and perpetuation of declining processes towards eco-effective interventions that promote create-ability.
- xxx. Invest in a structure that promotes mentoring and coaching of youth, adult and community.
- xxxi. Invest in intercultural projects to involve the different nationalities living in the surrounding communities
- xxxii. Facilitate swimming in specified areas of the coast.

Objective 4: To promote natural areas as sources for economic growth in the region.

- xxxiii. Encourage the farmers' co-operative to maximise use of rural development funds.
- xxxiv. Market the experience of a day of work in the fields, in the farm or at sea.
- xxxv. Encourage co-operatives for jobs and skills needed in the park area and its surroundings.
- xxxvi. Encourage the setting-up of a platform among NGOs as a step to maximise use of EU funds.
- xxxvii. Encourage alternative learning programmes for young people to learn skills and trades.
- xxxviii. Encourage roof gardening in the urbanised areas surrounding *Il-Park Nazzjonali tal-Inwadar* to:
 - Green urban areas.
 - Complement agriculture as the heart and soul of *Il-Park Nazzjonali tal-Inwadar*.
- xxxix. Explore the concept of fringe farming in unused agricultural land. Fringe farming is used as an economic asset in itself, and acts as a buffer to protect unused agricultural land.
- xl. Encourage eco-heritage trails from neighbouring villages and towns that link up with the heritage trails of *Il-Park Nazzjonali tal-Inwadar*.
- xli. Organise practical sessions with:
 - Farmers in fields within the Park and its surroundings for citizens to experience the life and work of the farmer.
 - Fishermen for citizens to experience the life and work of the fisherman.
- xlii. Invest in capacity building to accomplish the expectations of well-meaning citizens as well as to fulfil the potential of and mitigate the negativity around *Il-Park Nazzjonali tal-Inwadar*.

Objective 5: To establish the park as a valued need that empowers the community and enhances social wellbeing.

- xlili. Manage vehicular traffic within *Il-Park Nazzjonali tal-Inwadar* and the hinterland.
- xliv. Explore the possibility of providing existing structures as:
 - An intercultural dialogue centre.
 - Office or meeting space for cooperatives, social corporate enterprises and community enterprises.

- A research centre.
- A workshop for radical art.
- A museum of traditional fishing implements and methods.
- A museum of traditional farming implements and methods.

Objective 6: To act as a catalyst to boost existing businesses and endeavours nearby.

- xlv. Promote academia.
- xlvi. Promote the study of both land and sea landscape
- xlvi. Promote technology.
- xlvi. Promote research.
- xlix. Promote religious niche tourism by using assets within *Il-Park Nazzjonali tal-Inwadar* and its neighbouring hinterland together with other assets along the heritage trails.
- I. Promote military niche tourism using the military assets within *Il-Park Nazzjonali tal-Inwadar*, its hinterland and the neighbouring areas as well as additional assets along the heritage trails.
- li. Promote historical re-enactments linked to the fear of invasion from that stretch of coast spanning the times under the Knights of St. John to the British colonial period.
- lii. Promote the Blue Hole, the natural reefs, as well as the wrecks.
- liii. Explore the possibility of organic farming.
- liv. Encourage the traditional extraction of salt from the Salt Pans.