

19. 4. List of land use and management/cooperation plans

The main planning tools referred to in this Nomination Form are the following

Name of the document	Issuing authority	Summary (in English) included
1. Linee Guida del Piano Paesistico Regionale (adottato nel 1999) <i>Guidelines for the Regional Landscape Plan (adopted in 1999)</i>	REGIONE SICILIANA Assessorato dei Beni Culturali, Ambientali e della Pubblica Istruzione <i>SICILIAN REGION Department of Cultural and Environmental Heritage and Public Education</i>	X
2. Piano di Gestione del Sito Natura 2000 ‘Saline di Trapani e Marsala’ (adopted in 2016) <i>Management Plan for the ‘Saline di Trapani e Marsala’ Natura 2000 site (adopted in 2016)</i>	Provincia Regionale di Trapani e Regione Siciliana <i>Regional Province of Trapani and Sicilian Region</i>	X
3. Piano Regionale di Monitoraggio della Rete Ecologica Siciliana (adottato nel 2022) <i>Regional Monitoring Plan for the Sicilian Ecological Network (adopted in 2022)</i>	Regione Siciliana, Assessorato del Territorio e dell’Ambiente <i>Sicilian Region, Department of Territory and Environment</i>	X

1. Summary of the Regional Landscape Plan Guidelines (Linee Guida del Piano Territoriale Piano Territoriale Paestico Regionale – Regione Siciliana)

The Regional Landscape Plan Guidelines provide the overarching framework for the conservation, management, and enhancement of Sicily’s natural, cultural, and landscape heritage. Adopting an integrated approach, the Plan recognizes landscapes as the result of interactions between natural systems, human activities, and historical-cultural values. It establishes strategic objectives for biodiversity conservation, sustainable land use, protection of ecological networks, preservation of cultural landscapes, and improvement of environmental quality. The Guidelines identify landscape units across the region, define criteria for

landscape protection and management, and guide regional and local planning instruments. For the Saline di Sicilia area, the Plan supports the conservation of coastal wetlands, traditional salt-production landscapes, and associated cultural and ecological values, promoting a balance between environmental protection and sustainable development.

2. Summary of the Management Plan for the Natura 2000 Site "Saline di Trapani e Marsala" (Piano di Gestione del Sito Natura 2000 "Saline di Trapani e Marsala")

The **Management Plan for the Natura 2000 Site "Saline di Trapani e Marsala"** constitutes the principal strategic framework for the conservation and sustainable management of the coastal wetland system extending between the municipalities of Trapani, Paceco and Marsala in western Sicily. The Plan encompasses the Natura 2000 sites "Saline di Trapani", "Saline di Marsala", "Isole dello Stagnone di Marsala", "Fondali dell'Isola dello Stagnone" and the Special Protection Area "Stagnone di Marsala e Saline di Trapani", providing an integrated approach to the management of their ecological, cultural and socio-economic values.

The Plan is based on a comprehensive knowledge framework that integrates physical, ecological, socio-economic and cultural analyses. It describes the geomorphological evolution of the coastal system, the Mediterranean climatic regime, hydrological dynamics and landscape characteristics that have favoured the development of one of the Mediterranean's most significant systems of coastal lagoons, salt marshes, artificial salt pans and shallow marine environments. Particular attention is given to the ecological functioning of the hypersaline ecosystem and to the interdependence between natural processes and traditional salt production.

Extensive ecological assessments update and validate the Natura 2000 Standard Data Forms, confirming the exceptional conservation value of the area. The territory hosts priority habitats of European importance, including coastal lagoons, Mediterranean salt steppes, halophilous shrub communities, temporarily flooded salt meadows and extensive *Posidonia oceanica* meadows. These habitats support highly specialized halophytic vegetation, numerous endemic and rare plant species, and one of the most important wetland ecosystems for migratory, wintering and breeding waterbirds along the Central Mediterranean flyway. The ecological diversity of the area reflects the long-term interaction between natural coastal dynamics and traditional management practices associated with salt extraction.

Beyond its biodiversity significance, the Management Plan recognises the territory as an outstanding cultural landscape shaped by more than a millennium of salt production. Historic salt pans, windmills, hydraulic structures, archaeological sites and traditional settlements form an integrated heritage system that documents the long-standing relationship between local communities and their environment. The Plan therefore adopts an integrated conservation approach that addresses natural and cultural heritage as mutually reinforcing components of the same territorial identity.

The socio-economic assessment highlights the continuing importance of traditional saliculture as a key activity for both local livelihoods and biodiversity conservation. The maintenance of salt production is recognised as fundamental for preserving the hydraulic functioning of the ponds and channels, maintaining habitat diversity and sustaining ecological processes that depend upon active management. The Plan also examines fisheries, agriculture, tourism and recreational uses, identifying opportunities to strengthen sustainable local development while safeguarding ecosystem integrity.

A detailed analysis of pressures and threats identifies habitat fragmentation, urban expansion, infrastructure development, hydrological alteration, pollution, invasive alien species, changes in traditional land use and the anticipated impacts of climate change as the principal challenges affecting the conservation status of the area. To address these issues, the Plan establishes ecological indicators, monitoring protocols and adaptive management measures designed to maintain or restore favourable conservation status for habitats and species.

The Management Plan defines a coordinated programme of actions that includes habitat restoration, maintenance of traditional salt pan management, ecological monitoring, regulation of human activities, improvement of environmental connectivity, enhancement of the historic landscape and strengthening of environmental education and public awareness. Particular emphasis is placed on stakeholder participation, institutional cooperation and communication activities aimed at increasing local stewardship and promoting sustainable resource management.

The strategic objectives of the Management Plan are fully consistent with the three complementary functions of the UNESCO Man and the Biosphere Programme.

Conservation. The Plan establishes measures to ensure the long-term conservation of habitats, species and ecological processes of European and international importance, while safeguarding the cultural landscape created through centuries of traditional salt production.

Sustainable Development. The Plan promotes the continuation of traditional economic activities that contribute to biodiversity conservation, particularly artisanal salt production, sustainable fisheries and environmentally responsible tourism, recognising that local economic vitality and ecological integrity are mutually dependent.

Logistic Support. The Plan provides a framework for long-term ecological monitoring, scientific research, environmental education, stakeholder participation and communication. These actions support adaptive management and strengthen cooperation among public authorities, research institutions, protected area managers, local communities and economic operators.

Overall, the Management Plan represents a mature and integrated governance instrument that combines biodiversity conservation, cultural heritage protection and sustainable territorial development within a single management framework. Its ecosystem-based approach, strong recognition of the value of traditional knowledge and emphasis on participatory governance provide a robust foundation for the proposed UNESCO Biosphere Reserve and demonstrate the territory's capacity to fulfil the objectives and functions of the UNESCO Man and the Biosphere Programme.

3. Summary of the Regional Monitoring Plan of the Sicilia Ecological Network

The **Piano Regionale di Monitoraggio della Rete Ecologica Siciliana (PRM)** establishes the regional framework for the systematic monitoring of habitats and species of conservation interest across Sicily, with particular focus on the Natura 2000 network and the Sicilian Ecological Network. It was developed in accordance with the EU Habitats Directive and supports reporting obligations under Article 17, as well as

the definition of conservation measures and management actions. The Plan adopts standardized monitoring methodologies developed at national level and provides a comprehensive network of monitoring sites for habitats, flora, and fauna throughout the region. It aims to assess the conservation status and trends of biodiversity, improve knowledge of species distribution, identify threats and invasive species, and support adaptive management of protected areas. The PRM also promotes data sharing, collaboration among research institutions and protected-area managers, and the integration of citizen-science initiatives into regional biodiversity monitoring.

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