

The contribution of the Messolonghi Lagoon to the Environmental, Social and Cultural Development of Western Greece



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Western Greece – Location of Lagoon Messolonghi



Air view of Acheloos River Delta



Management Authority of the Messolonghi Lagoon

The Management Authority of the Messolonghi Lagoon is one of the 27 management Authorities of the Ministry of Environment, Forestry and Climate Change, which is also responsible for their operation.

The purpose of the Management Authority of the Messolonghi Lagoon is the protection, management and promotion of nature and landscape, as a natural heritage and a valuable national natural resource of the Protected Area:

"National Park of the Messolonghi – Aitoliko Lagoons, the lower reaches and estuaries of the Acheloos and Evinos rivers and the Echinades islands"

Goal: management of rare habitats and species

The park is located at the southwestern tip of Central Greece, where the Gulf of Patras meets the Ionian Sea and the rivers Evinos and Acheloos flow out.

It is one of the richest wetlands in Europe, both in terms of number of species and population.

This area includes lagoon, terrestrial and river areas of the southern part of the Prefecture of Aitolokarnania and the island complex of Echinades of the Prefecture of Kefallinia, which are distinguished for their great biological, ecological, aesthetic, scientific, geomorphological and environmental value.



The park includes

The extensive wetland complex of the Messolonghi – Aitoliko lagoon and the estuarine systems of the Evinos and Acheloos rivers. This complex includes river and riverine areas, lagoons, freshwater marshes, salt marshes, mudflats, and water-rich forests.

The Evinos and Acheloos rivers have played a leading role in shaping the wetland area, which also constitute its natural boundaries to the east and west respectively.



Messolonghi – Aitoliko Lagoon

The lagoon of Messolonghi - Aitoliko is the **largest in our country** and one of the largest in the Mediterranean.

Today, based on the geomorphology of the area as it emerged from anthropogenic interventions in the period 1960-1995, it consists of a system of 6 lagoons that are relatively isolated from each other and present different physicochemical characteristics.

Their area reaches 150,000 acres, while the wider area of the wetland includes coastal ecosystems, swamps, saline areas and drained areas that were attributed to agriculture.

Messolonghi – Aitoliko Lagoon

A lagoon complex has been formed in which **six sections**, as follows:

- 1) Northern Strait of Klisovas Lagoon
- 2) Klisovas Lagoon
- 3) Central Lagoon: At the front of the central lagoon there are the fish farms (fishing sites): Turlida, Vasiladi, Schinias and Prokopanistos



- 4) Tholis Lagoon
- 5) Paleopotamos Lagoon
- 6) Aitoliko Lagoon (Aitolikos Channel)

Messolonghi – Aitoliko Lagoon

The Terrestrial Zone of the protected area includes:

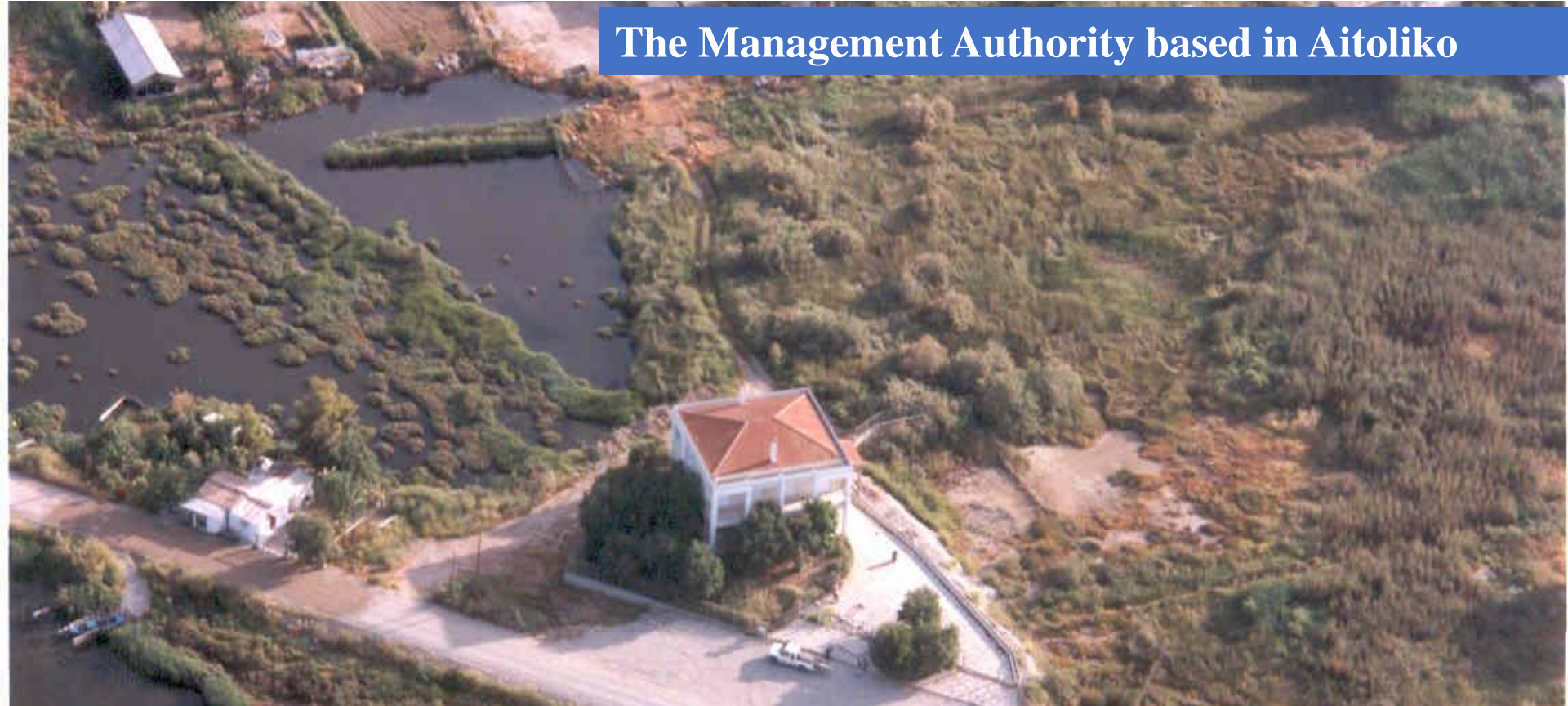
- Hills scattered throughout the wetland, many of which were part of the Echinades Islands that the alluvial action of the Acheloos incorporated into the land
- Mount Varasova (game reserve) and part of Mount Arakynthos
- Sand dunes created by the materials carried by the rivers and delimiting the lagoons from the open sea
- The Kleisoura gorge, which has been included in the areas of "special beauty"
- The Fraxos Forest, characterized as a "Preserved Monument of Nature"
- Cultivated areas
- The island complex of Echinades, which is inextricably linked to the estuarine system of Acheloos.



The lagoon, in terms of its production, is not distinguished for the great variety of fish, but for the large populations that it can accommodate. Thus, the **lagoon's production is limited to only a few species**, mainly: gilthead sea bream (*Sparus aurata*), sea bass (*Dicentrarchus labrax*), eels (*Anguilla*), gobies and various species of mullet (*Mugilidae*). From the female mullet (*Mugil cephalus*), the buffa, the famous Messolonghi roe is produced, the **only fishery product with a Protected Designation of Origin (PDO)**.



The Management Authority based in Aitoliko



Messolonghi – Aitoliko Lagoon

Absolute Protection Zones – Permitted Activities

1. Scientific research-monitoring of the ecosystem,
2. Observation of nature, in accordance with the management and operating regulations of our Agency,
3. Execution of work for the preservation, protection and improvement of ecosystems,
4. Supervision of the area exclusively by the Management Authority of the Messolonghi Lagoon,
5. Maintenance-restoration of temples, monasteries and archaeologically protected objects.



Messolonghi – Aitoliko Lagoon

Nature Protection Zones – Permitted Activities

1. Nature observation
2. Scientific research and environmental education
3. The execution of projects for the management, maintenance and operation of permitted facilities and activities
4. The execution of water resources management projects, including water quality improvement projects or water renewal
5. Gentle recreation and ecotourism activities in accordance with the operating regulations of the Nature Protection Authority
6. The installation of ecological awareness centers, observatories, scientific equipment, always after a relevant study with the consent of the Nature Protection Authority
7. The cleaning of canals and ditches outside the breeding season of the bird fauna

Messolonghi – Aitoliko Lagoon

Regional Zones

In the Regional Protection Zones, additional activities beyond those permitted in absolute protection areas are allowed.

❑ Although some aspects may still be unfamiliar to the broader public, they are **valuable for scientists, environmental organizations, and students.**

❑ **Funding approval** is expected from the Ministry of Environment and Public Works to support:

- ✓ Scientific conferences
- ✓ Educational initiatives
- ✓ Public awareness campaigns



Key Environmental Projects and Actions

We have the integration of important projects and environmental actions, which will give a special role to the operation of the body and will contribute greatly to the intended **public awareness** of environmental issues.

Main projects:

1. Scientific database and their utilization - environmental data, monitoring program of the protected area
2. Wetland Conservation and Supervision Program
3. Information and awareness actions
4. Marking and information signs of wetland areas
5. Protection, promotion, accessibility of islets
6. Management plan, administration & operation regulations of a protected area
7. Study - research - implementation for the safe reuse of treated wastewater from biological treatment



Key Environmental Projects and Actions

Main projects:

8. Development of GIS (Geographic Information Systems)
9. Study of recording - restoration of areas of uncontrolled waste disposal in the wetlands area of Messolonghi - Aitoliko
10. Addressing water quality problems from the operation of pumping stations
11. Study of identifying areas for the disposal of aggregates



Collaboration: A Pillar of Environmental Protection

In order for environmental services to meet their responsibilities, there must be continuous and substantial cooperation with Services, structures and bodies.

This is also indicated by today's conference with the aim of getting to know and exchanging experiences/opinions with those involved either as managers or as users, in the main issue:

“The maintenance, or where necessary - the upgrading, of the aquatic environmental quality and the rationalization of its exploitation”



Air view of Aitoliko and Messolonghi lagoon ecosystem



Thank you for your attention

