

ALLOCATED MARINE ZONES FOR AQUACULTURE (AZA)

- A TECHNICAL GUIDE -

“Ensuring the sustainable development of aquaculture through spatial planning and increased potential of sites” is among the key objectives of the Strategic Aquaculture Plan 2014-2020 and the Operational Program of the EMFF 2014-2020 to promote an innovative and competitive aquaculture, sustainable and resource efficient aquaculture.

This Technical Guide is a tool to facilitate the understanding of the processes for the Allocation of marine Zone for Aquaculture (AZA) and to guide in the selection of new sites, ensuring the protection of the environment, the conservation of biodiversity and integrating the activities of aquaculture in maritime spatial planning, according to an ecosystem approach to aquaculture (FAO).

The assignment of marine spaces by the competent authorities has to be based on the best environmental, technical, biological knowledge and shall apply tools and models that will allow prediction and measurement of the potential impacts of aquaculture activities.

This Technical Guide provides the advanced knowledge, the tools and the methodological approach to identify: I) **marine zones for aquaculture (AZA)**, based on the environmental and oceanographic characteristics of coastal marine areas, logistics and services, using GIS tools and numerical models; II) **suitable sites**, based on environmental characterization surveys, carrying capacity estimation, environmental impact assessment, and maritime state-owned concessions; III) **environmental monitoring programmes** to be carried out in the licensed marine areas, according to the produced biomass and the characteristics of the site, to monitor potential impacts and reduce environmental and sanitary risks, complying to an adaptive approach.

This publication, drafted by ISPRA for the MiPAAF General Direction for Maritime Fisheries and Aquaculture, is the result of a long participatory process, shared both at regional level Mediterranean with the FAO-GFCM, with which ISPRA collaborated for the drafting of the AZA Guide for the Mediterranean and the Black Sea, and at national level with the competent regional directorates and ministries, producer associations, aquaculture operators, the scientific community, environmental agencies and experimental zooprophyllactic institutes.

For these reasons, the technical contents of this Guide can be a valuable and ready support to regional Authorities and to the Technical Committee of the Ministry of Infrastructure and Transport, which are developing the Maritime Space Management Plans, (Legislative Decree 201/2016) as well as to all parties involved in the planning of the development of aquaculture in marine areas and supporting the sustainable growth of aquaculture in the framework of Italian Blue economy.

IDENTIFICATION OF MARINE ZONES (AZA)

- 01 Preliminary sector analysis
- 02 Analysis of constraints, uses and free areas
- 03 Stakeholder consultation
- 04 Suitability criteria analysis
- 05 Environmental analysis
- 06 Zoning
- 07 Establishment of AZAs and integration into the legal framework

IDENTIFICATION OF FARMING SITES

- 08 Preliminary study of the site
- 09 Survey and environmental characterization
- 10 Carrying capacity of marine area
- 11 Environmental Impact assessment
- 12 Water classification (bivalve molluscs)
- 13 Licence request
- 14 Other authorizations

MONITORING AND MANAGEMENT

- 15 Environmental Monitoring Programme (EMP)
- 16 Impact sources and abiotic and biotic components to be monitored
- 17 Allowable Zones of Effect (AZE)
- 18 Types of EMPs
- 19 Environmental reporting