Standard Classification of Coastal Ecological Mazandaran province (range Nowshar-Babolsar) Classification based on Ecological Standards in the southern Caspian Sea Coastal-Marine areas (CMECS), Using (GIS)

[فریدون عوفی Owfi . Fereidoon]
[مریم نوری بالانجی Noory Balaneji . Maryam]
[رحیم آقاپور ساعتلو Aghapour saatlo . Rahim]
[مهدی ابوفاضلی Aboufazeli . Mehdi]
[زهرا نوری بالانجی Noory Balaneji . Zahra]
[noory . Samaneh سمانه نوری]

Abstract
Natural resource managers and environmental planners are faced with multiple problems in making decision for coastal-Marin ecologies protection, sustainable utilizing of valuable resources, and the Integrated Coastal Zone Management (ICZM). Despite the fact that there are considerable data about the multiple types of ecologies and their importance in the various life stages of valuable fauna and flora species available, their knowledge about diversity of ecologies, range, distribution of ecologies, and their ecological characteristics is negligible. In addition, according to the existing criteria and standards and resources and reserves management, implementing the programs which protect the local settlement and sensitive and vulnerable ecologies will be delayed, and it will be impossible to evaluate their condition without the availability of maps which are based on the geographical information system (GIS).

The coastline of Caspian sea is 873 km long, of which 487 km belongs to Mazandaran province; the Iranian Fisheries Organization (Shilat) and also the private sector have considered this area for investigating and utilizing the aquaculture industry, so before any activities and actions it is better to determine the capacity of these coasts for development based on the international standards in order to provide a clear vision of available potential and limitations for development and management strategies for administrators and macro planners.

This study is implemented during a one-year period (1389-1390) and four seasonal field studies (in order to determine the possible effects of seasonal climate change) with the aim to identify, classify and coding the coastal ecologies of Nowshahr-Babolsar regions in Mazandaran province based on the ecological standards of CMECS model. In addition, the analysis of satellite images and maps of spatial location was performed by using the geographical information system (GIS) in order to be consistent with the international criteria of classification, based on two components of information levels including the Surface Geology Component (SGC) and the Biotic Cover Component (BCC). Encoding used in this model includes 22 standard codes which are Near Shore and Estuarine of encoding system CMECS III (relating to the corrective versions of CMECS in 2008 and 2009); and it finally helps to provide administrative strategies in order to plan for the conservation and sustainable development, and