

P1.25**Integrated Institutional of Land-Sea Eco-environmental Protection and Restoration Based on MSES in the GBA**

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Abstract

There is a wide range of natural, social and economic links between land and sea. It is a complex adaptive system coupled with a typical social system and ecological system. It has the characteristics of integrity, interaction, indivisibility, complexity and uncertainty, which determines that the Protection and Restoration of Land-Sea Ecological and Environment (PRLSEE) needs to be systematic and complexity method. Fortunately, the theory of marine social-ecological system (MSES) provides an effective solution to this need. MSES emphasizes the integration of land-sea social system and ecological system to realize the integrated management of eco-environment protection and restoration, and to design institutional that matches the diversity of natural ecological and economic and social conditions to resolve all kinds of problems. And defuse all kinds of risks with different characteristics (Ostrom, 2005). So, this paper takes the PRLSEE in the Great Bay Area of China as an example under different institutional environments, combines with the framework of MSES cooperative governance, and uses the method of institutional equilibrium analysis to focus on the institutional needs of the PRLSEE in the Great Bay Area. The results show that the PRLSEE in the Great Bay Area has the same origin and homology. The integrated protection and restoration meets the requirements of ecosystem integrity, and is also conducive to the interaction and healthy development of land-sea social system and ecological system. Therefore, according to the goal of integrated land-sea social-ecological governance, this paper proposes to design an integrated system for the PRLSEE in the Great Bay Area, including institutional environmental arrangements, institutional coordination mechanisms and specific institutional structures, such as the ecological red line institutional, ecological environment supervision institutional, ecological environment governance institutional, pollution emission permit institutional, ecological damage and environmental pollution punishment institutional, ecological environment damage compensation institutional, etc.

Keywords

Land sea interaction, Ecological protection , MSES