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Marine Spatial Planning Application in China and Future Directions for Biodiversity Conservation

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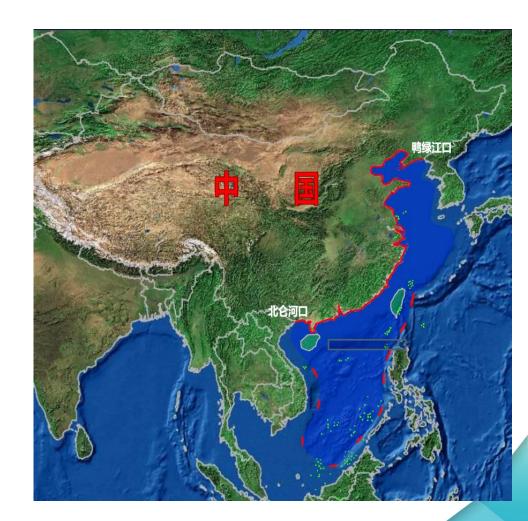
Outlines

- 1 Marine Spatial Planning Application in China
- 2 Future Directions for Biodiversity Conservation
- 3 Recommendations



Background

- China sea area across temperate zone, subtropics and tropics
- Covered the Bohai Sea, the Yellow Sea, the East China Sea, the South China Sea and the East of Taiwan
- China's mainland coastline more than 18,000 kilometers
- More than 7,300 islands with an area of more than 500 square meters



Background

- ➢ 6 marine laws, more than 30 laws and regulations.
- Related to Marine Spatial Planning:
 Regulation Law on the Use of the Sea Area,
 Marine Environmental Protection Law, Island
 Protection Law.

- Marine Functional Zoning
- Island Protection Planning
- > Coastal Development and

Protection Planning





中华人民共和国海洋环境保护法



中华人民共和国海域使用管理法



中华人民共和国 海岛保护法

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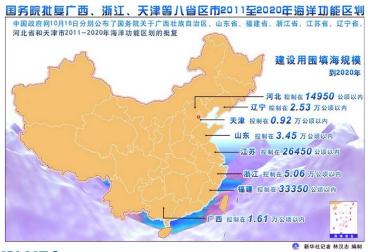






The Development of MSP in China

- ➤ In 1978, the concept of Marine Functional Zoning was proposed.
- ➤ In 2002, Marine Functional Zoning was established as one of the basic systems of marine management.
- > Three generations of MFZ have been compiled and implemented.



















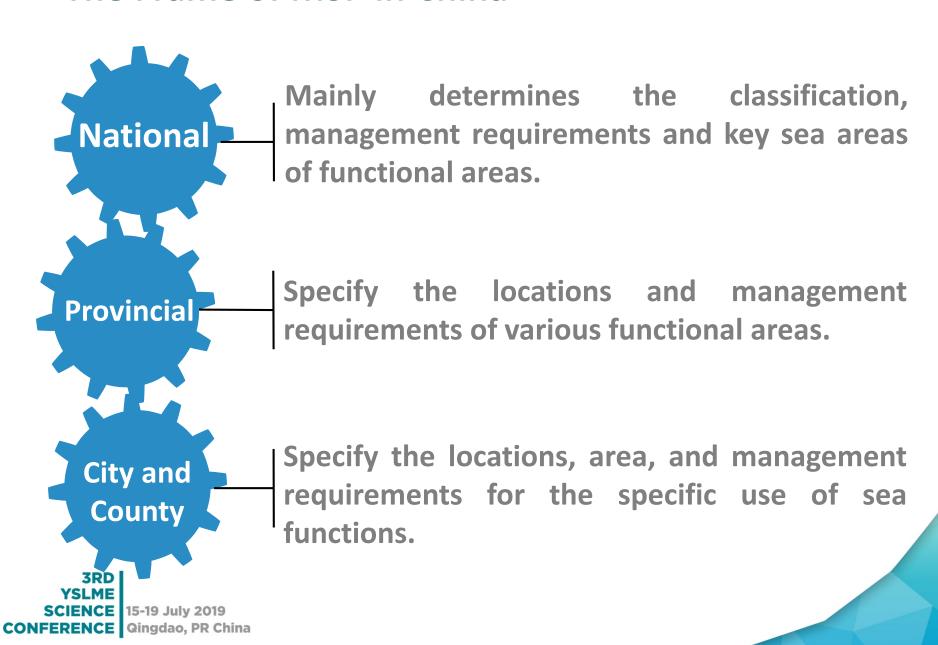
The Development of MSP in China

- > The Third Marine Functional Zoning (2011-2020)
- The third MFZ compiled from 2009 to 2012, and implemented to 2020.
- In 2012, the State Council approved the National Marine Functional Zoning and 11 provincial MFZs. Most City and county MFZs have been completed.





The Frame of MSP in China













The Frame of MSP in China

Code	Name	
1	Agriculture & Fishery	
2	Port & Navigation	
3	Industrial & Urban Construction	
4	Mineral & Energy	
5	Tourism & Recreation	
6	Marine Protection	
7	Special Uses	
8	Reserved	

Classification System

China's MFZ adopts a two-level classification system, which is divided into 8 zones and 22 subzones.

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Code	Name
1.1	Land-Reclamation for Agriculture
1.2	Fishery Infrastructure
1.3	Aquaculture
1.4	Fish Enhancement
1.5	Catch Fishery
1.6	Conserve of Key Fishery Species
2.1	Port
2.2	Navigation Channel
2.3	Anchorage
3.1	Industrial Construction
3.2	Urban Construction













The Trend of MSP in China

- **According to the "Decision of the Central Committee of the Communist** Party of China on Deepening the Reform of the Party and State Institutions "(《中共中央关于深化党和国家机构改革的决定》), the Ministry of Natural Resources is established.
- The duties of MNR are summaries as "two unification" (两统一).



Unified exercise of the ownership of natural resources assets owned by the whole people



Unified exercise of national spatial utilization control and ecological protection and restoration



National spatial planning





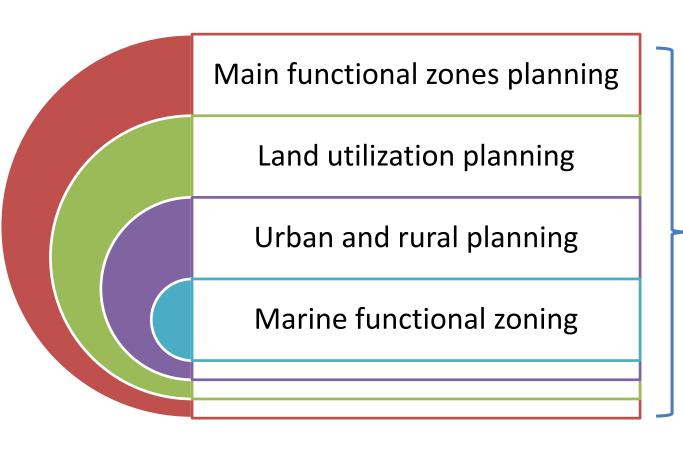








The Trend of MSP in China



National Spatial Planning















The Trend of MSP in China

The frame of national spatial planning

"五级三类四体系" 5 levels, 3 classifications, 4 systems



5 levels: national, provincial, city-level, county-level, town-level



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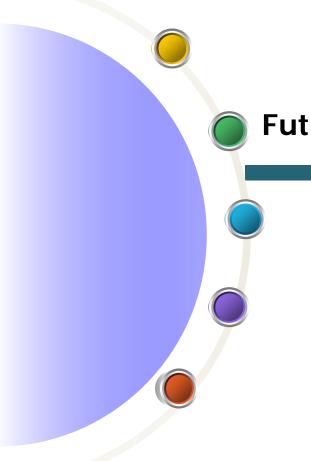












Future Directions for Biodiversity Conservation

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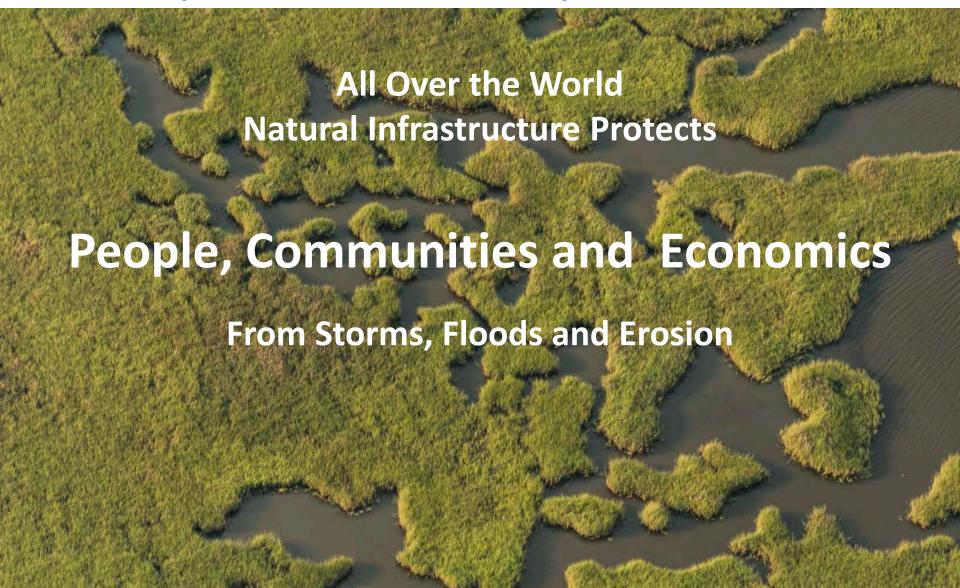








The Importance of Biodiversity Conservation















The Importance of Biodiversity Conservation



Coral reefs



Shellfish reefs



Mangrove forests



Seagrass meadows



Salt marsh



Rocky Reef



Upwelling zones



Pelagic habitats















Factors affecting biodiversity



Topography

Hydrology (river, lake, sea)

Soil

Organism (vegetation)

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Horizontal geographical differentiation (from equatorial to bipolar, from coast to inland)

Vertical geographical differentiation











Methods of protecting biodiversity

1. Designing biodiversity conservation corridor in MSP

Biodiversity conservation corridors can prevent ecosystem degradation and biodiversity loss, improve ecosystem services, eliminate the effects of habitat fragmentation on biodiversity, and restore populations of rare and endangered species, which is fundamental in maintaining the balance and stability of natural ecosystems.













Methods of protecting biodiversity

2. Establishing nature reserves/ protection zones in MSP

The nature reserves are delimited to protect natural resources and the ecological environment, which are specially protected and managed.

Nature reserves play a very important role in many aspects such as biological inheritance, population reproduction and ecological environment protection.

The biological resources in the nature reserves must be used reasonably and effectively so that the biodiversity of the region can be regenerated and developed at all levels.















Methods of protecting biodiversity

3. Preventing the invasion of alien species and proposing relevant management measures in MSP

As an important factor in destroying biodiversity, the invasion of alien species will change the population and structure of the local population, posing a threat to the ecological environment and human health.

Strict restrictions were imposed on the introduction of alien species to establish an early warning mechanism for invasive alien species. At the same time, it is required to carry out census and planned removal of alien species by relevant departments, which is an effective means of biodiversity conservation.















Recommendation for Future work on Marine Spatial Planning







Intergovernmental Oceanographic Commission

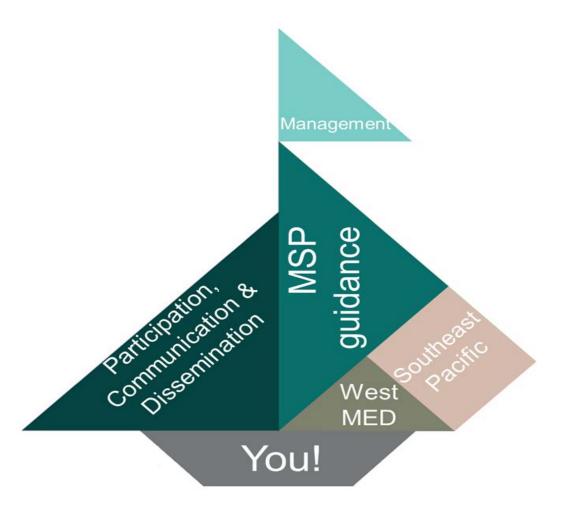
UNESCO's Intergovernmental Oceanographic Commission (IOC-UNESCO have launched MSPglobal, a new joint initiative to promote cross-border maritime spatial planning.

MSPglobal is a new three-year long initiative that will call on regional experts to:

- Develop guidance on international cross-border planning;
- Perform two pilot regional projects in the West Mediterranean and the Southeast Pacific with a specific cross-border exercise at the historical Bay of Guayaquil (Ecuador/Peru) and training activities benefiting Chile, Colombia, Ecuador, Panama and Peru;
- Communicate and disseminate all results.







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