

Task Force on Water-Land Interface

For discussion
on 23 September 2014

TFWL/03/2014

A Sustainable Use of Our Sea – Marine Spatial Planning

PURPOSE

1. This paper provides an overview of Marine Spatial Planning (MSP), and its potential as a planning tool for sustainable use of marine resources in Hong Kong.

BACKGROUND

2. Hong Kong has a long coastline with more than 200 islands. Its special geographical location and hydrographic condition contributes to the diverse and productive coastal and marine habitats. The beautiful marine environment supports rich and diverse marine species, nourishing more than 1,000 species of fish, 85 species of hard corals, two species of horseshoe crabs and marine mammals etc. The sea is an important and precious resource, and should be carefully managed to conserve biodiversity, and at the same time to support fisheries, recreation, and a high quality of life. A healthy sea provides a wealth of benefits to Hong Kong communities.

3. In Hong Kong, only less than 2% of marine water is designated as protected areas, with the rest of waters receive little or no protection. Many ecologically sensitive areas suffer from a lack of adequate policy legislation and management, while coastal development, habitat destruction (e.g. from reclamation) and degradation (worsen water quality due to dredging, filling and water pollution) are continuous threats. These threats have had a major and cumulative impact on the various marine species populations and habitats for years.

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4. In recent years, several public consultations on reclamation, such as “Airport Expansion – Third Runway Construction”, “Enhancing Land Supply Strategy” and “Tung Chung New Town Extension Study Public Engagement” were launched for receiving public’s views on reclamation. Reclamation is irreversible and highly destructive to the marine environment that leads to permanent loss of marine habitats and fishing grounds, and potentially eradicating breeding, nursery and foraging grounds of marine life. It is necessary to take a proactive approach, e.g. sea use planning, so as to conserve our vulnerable sea before it’s too late.

5. Conserving Hong Kong’s biodiversity requires protecting both individual species and the habitats upon which they depend. Land use planning has been adopted in Hong Kong to ensure the proper use of terrestrial land for decades, with reference to the environment, habitat types and conservation values, however, there is no similar planning for the sea. In order to better conserve our valuable marine and seabed area and at the same time cater for the growing human usage, the government should start considering the development of coastal and marine spatial planning exercise for striking a balance of seabed use between human development and conservation of the sea in Hong Kong waters. This type of planning usually involves baseline assessment of coastal and marine environment, which further helps determine what uses are compatible / incompatible to the environment and to define which areas are best suited for protection and which ones for development or heavy use. It is a critical coastal management tool for achieving sustainable development and has been widely used in countries like USA (Massachusetts and Rhode Island) and Belgium¹.

¹ <http://www.oceanconservancy.org/our-work/marine-spatial-planning/> Accessed on 29 March 2012.

WHAT IS MARINE SPATIAL PLANNING?

6. Marine Spatial Planning (MSP) is a proactive, operational process to manage human activities on the ocean. It can also help to introduce an ecosystem-based management (EBM) approach to the planning and management of marine areas.

*'EBM is an integrated approach to resource management that considers the entire ecosystem, including humans. It requires managing ecosystems as a whole instead of separately managing their individual components or uses, considers all the elements that are integral to ecosystem functions, and accounts for economic and social benefits as well as environmental stewardship concerns. The concept of EBM is underpinned by sound science and a commitment to adaptive management as information or changing conditions present new challenges and opportunities.'*²

7. MSP analyzes and allocates space and resources in the most appropriate way to minimize conflicts and find synergies among sectors. While identifying the most efficient, effective, and equitable way to plan and manage the use of our sea and coasts in a clear fashion, MSP has an important function to support environmental protection and the sustainable provision of important ecosystem goods and services³.

² US Draft National Ocean Policy Implementation Plan (2012)
http://www.whitehouse.gov/sites/default/files/microsites/ceq/national_ocean_policy_draft_implementation_plan_01-12-12.pdf

³ Ecosystem services are “the conditions and processes through which natural ecosystems, and the species that make them up, sustain and fulfil human life. They maintain biodiversity and the production of ecosystem goods, such as seafood, forage timber, biomass fuels, natural fibre, and many pharmaceuticals, industrial products, and their precursors (Daily 1997b:3). Ecosystem goods (such as food) and services (such as waste assimilation) represent the benefits human populations derive, directly or indirectly, from ecosystem functions (Costanza et al. 1997:253). For more please refer to UNEP paper <http://www.unep.org/maweb/documents/document.300.aspx.pdf>

8. MSP is knowledge based, including traditional and local knowledge; it uses decision support tools, shares information and maps conflicts and compatibilities so that all sectors and stakeholders benefit by reducing conflict and identifying complimentary uses.

WWF-HONG KONG's POSITION ON MSP

9. To minimize the disputes between marine conservation and development in recent years, WWF-Hong Kong has been urging the Hong Kong government to implement MSP, in which to allocate Hong Kong marine resources in the most appropriate way and to find synergies among sectors.

10. The conflicts and disputes between development and conservation have been escalating in recent years, and numerous large-scale infrastructure projects are either underway or in the planning process, increasing demand for the limited space and resources of the sea.

11. Instead of using a fragmented and reactive approach to solve the problems, it is time to end the unplanned use of our sea resources, and to implement the MSP, in which a public process of analyzing and allocating the spatial and temporal distribution of human activities in marine areas, and to achieve ecological, economic, and social objectives.

12. The implementation of MSP will not only reduce conflicts between human activities and between activities and marine environment, but also avoid imposing further cumulative impact to the nature. Besides, it helps reduce fragmentation of marine habitats, and encourage stakeholder participation during the planning process.

RECOMMENDATIONS ON MSP

- The objectives for MSP should be measurable and sector-wide (all users of marine space and resources must be covered, including fishing) and ensure that the total use of the sea does not exceed the capacity of the ecosystem to deliver essential goods and services.
- MSP should take into account existing environmental objectives for the conservation, management and exploitation of marine biological resources. It should also deliver an ecologically coherent, representative and well-managed network of marine protected areas (MPAs).
- Community leadership and participation are essential for the development and implementation of MSP. Ideally, MSP is a top down/bottom up process that reflects the values and uniqueness of any given marine ecosystem, economy and people.
- Socioeconomic factors should be fully integrated and are an essential part of MSP. Political considerations, social values and public attitudes are part of a living and dynamic ocean. Understanding their interactions with biophysical components of the ecosystem is important to effective decision making in any marine region.
- MSP should provide clear direction and goals to be achieved, and a timeframe for these to be met. Coherent direction, goals and procedures must be defined, as many marine and coastal activities occur not only at the local level but even on a regional scale, e.g., shipping, ports and harbours, pipelines, and tourism.
- MSP should be regulatory and enforceable. Government authorities with an ocean-wide, legal and cross-sectoral responsibility should convene and lead the MSP process. These authorities should have the budgetary responsibility and authority for its funding, timelines and outcomes.

- MSP should be considered as a proactive and iterative process, not simply to produce a static zoning plan, but to provide long term foundations for co-operation among sectors and levels of management to achieve more integrated decision making and more efficient and sustainable use of resources.

CONCLUSION

13. MSP is an evolving and increasingly accepted practice from which valuable lessons can be learnt. Its growing application internationally highlights potential benefits and advantages for ecosystem-based, integrated sea use management. WWF believes that there is a strong need for MSP in Hong Kong to strike for a balance between conservation and development, as well as safeguard ocean ecosystems on which communities and economies depend.

WWF – Hong Kong

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