Committee Paper: WP/CMPB/11/2013

Country and Marine Parks Board

Management and Protection of Marine Parks and Marine Reserve in Hong Kong

1. Purpose

To give Members a general overview on the management and protection of the designated Marine Parks and Marine Reserve in Hong Kong, including their designation history, natural and ecological characters.

2. Background

- 2.1 Marine Parks and Marine Reserves are set up for the purpose of conservation of marine resources, recreation, scientific studies and public education for the appreciation and wise use of precious resources in the Marine Parks. The main difference between Marine Park and Marine Reserve is that there is no recreational element for Marine Reserve.
- 2.2 Upon the enactment of Marine Parks Ordinance (Cap. 476) in 1995 and Marine Parks and Marine Reserves Regulation in 1996, AFCD was stipulated to recommend, designate and manage Marine Parks and Marine Reserves, as well as to facilitate recreational, educational and scientific activities.
- 2.3 Until now, four Marine Parks and one Marine Reserve have been designated in Hong Kong. They are namely, Hoi Ha Wan Marine Park, Yan Chau Tong Marine Park, Sha Chau and Lung Kwu Chau Marine Park, Tung Ping Chau Marine Park and Cape D'Aguilar Marine Reserve (Figure 1).

3. Designated Marine Parks and Marine Reserve

The first batch of Marine Parks and Marine Reserve were designated in Hong Kong on 5 July 1996 including Hoi Ha Wan Marine Park, Yan Chau Tong Marine Park and Cape D' Aguilar Marine Reserve. Two more Marine Parks, namely Sha Chu and Lung Kwu Chau Marine Park and Tung Ping Chau Marine Park, were designated in late 1996 and 2001 respectively.

• <u>Hoi Ha Wan Marine Park</u> is located in the south of West Sai Kung Country Park (Figure 2) which covers an area of about 260 hectares. This Marine Park is well-known with good water quality and diverse marine lives. The coral communities in Hoi Ha Wan

Marine Park are most famous and 64 out of the 84 stony coral species recorded in Hong Kong have been recorded in this Marine Park. Six species of true mangroves can be found here and more than 120 species of coral associated fishes have been sited.

- Yan Chau Tong Marine Park is located at the northeast coast of Plover Cove Country Park and is made up of two portions, covering a sea area of about 680 hectares (Figure 3). This Marine Park is well-known of its rich fishery resources. Here, two important ecological habitats, including both mangrove and seagrass beds, act as nursery grounds for larvae and juvenile of fishes and many different marine lives. The seagrass bed of Japanese eel grass (*Zostera japonica*) at Lai Chi Wo in Yan Chau Tong Marine Park is the largest found in Hong Kong of about 2 hectares. The mangroves at Lai Chi Wo and Sam A cover an area of about 2.7 hectares and 3 hectares respectively. There are 8 true mangrove species recorded at Lai Chi Wo.
- <u>Cape D'Aguilar Marine Reserve</u> is the only Marine Reserve designated in Hong Kong that lies on the southeastern tip of the Hong Kong Island. The total sea area is about 20 hectares (Figure 4). The biodiversity of the Marine Reserve is rich, including numerous kinds of fishes, hard corals, soft corals, gorgonians and marine invertebrates. In order to protect these important organisms and their habitats, all activities except those permitted for scientific purpose are prohibited in the Marine Reserve.
- Sha Chau and Lung Kwu Chau Marine Park was designated on 22 November 1996. This Marine Park locates in the western waters of Hong Kong (Figure 5) which covers a sea area of about 1,200 hectares. Sha Chau and Lung Kwu Chau Marine Park is well-known for its richness in fisheries resources which serves as an important feeding ground for the Chinese White Dolphin.
- Tung Ping Chau Marine Park is the latest Marine Park designated in Hong Kong on 16 November 2001. The Marine Park covers a sea area of about 270 hectares in the Mirs Bay on the northeastern waters of Hong Kong (Figure 6). Tung Ping Chau Marine Park is also known with high coverage and species diversity of hard corals. Out of the 84 species of hard coral recorded in Hong Kong, 65 species have been found in Tung Ping Chau Marine Park. Moreover, over 130 reef-associated fishes and more than 200 species of marine invertebrates have been recorded in the Marine Park.

4. Management and Protection of Marine Parks and Marine Reserve

4.1 Country and Marine Parks Authority (also Director of Agriculture, Fisheries and Conservation) is responsible for planning and management of Marine Parks and Marine Reserve in Hong Kong. Management and protection works include,

- Planning for proper utilization of existing marine protected areas (MPAs) (including both Marine Parks and Marine Reserve),
- Enforcing the Marine Parks Ordinance (Cap. 476) and the Marine Parks and Marine Reserve Regulation (Cap. 476A) to achieve the resource sustainability,
- Monitoring the ecology, environment and activities within the MPAs, and
- Organizing marine conservation related education and public awareness programmes.

4.2 Marine Parks Management Plan

To achieve the conservation objective of Marine Parks, activities inside the Marine Parks must be monitored and regulated. A zoning approach has been adopted as an effective management measure for the Marine Parks.

Zoning type	Purpose (location)
Anchoring area	The only area in the Marine Parks where anchoring is
	allowed. Anchoring area is established to avoid improper
	anchoring activities which may result in coral damaging.
	(Hoi Ha Wan, Yan Chau Tong and Tung Ping Chau)
Core Area	Core areas are designated to protect corals and other
	valuable marine lives. All fishing activities are
	prohibited inside the core area. (Tung Ping Chau)
Mechanized Vessels	The entry of mechanized vessels in the zone is
Prohibited Zone	prohibited. This zone is used to protect the divers and
	snorkelers from collision by mechanized vessels in the
	coastal areas. (Hoi Ha Wan)
Inboard Vessels Prohibited	The entry of inboard mechanized vessels in the zone is
Zone	prohibited. This zone is used to protect corals in the
	shallow coastal area from collision by large inboard
	mechanized vessels. (Hoi Ha Wan)

4.3 Fishing Control

In order to protect and conserve marine habitats and resources, no fishing is allowed in Marine Reserve and a control on fishing activities in Marine Parks is adopted. No destructive fishing is allowed in Marine Parks whereas other forms of fishing are controlled through a permit system. Generally, only fishermen who have been fishing in the Marine Parks before their designation will be issued with Fishing Permits. There are strict controls on the types of

fishing gear used, area of fishing and number of crews to be allowed on board fishing in the Marine Parks. Fishermen are required to strictly follow the conditions set out in the Fishing Permit. A Working Group on Fishing Permit has been established to advise the Country and Marine Parks Authority on the criteria and guidelines for issuing Fishing Permits and to consider problematic cases.

4.4 Enforcement

Marine Parks Wardens carry out patrols in all Marine Parks and Marine Reserve daily both by sea and on land at an irregular pattern. The Department would, having regard to the circumstances of individual marine parks, such as visitor numbers and types of water activities, exercise flexible deployment of resources and adjust the patrol patterns to discharge the law enforcement duties more effectively. One of the tasks of Marine Parks Warden is to monitor all activities inside Marine Parks and Marine Reserve and make sure all Marine Park users are complying with the Marine Parks Ordinance (CAP. 476) and the Marine Parks and Marine Reserves Regulation (CAP. 476A). Our Marine Park Wardens also provide advisory service to Marine Park visitors upon request.

We have worked closely with Marine Police and enforcement agencies in the Mainland to maintain effective communication. Joint actions have been organized to combat cross-border illegal fishing activities with a view to protecting the marine ecological resources of the region, in particular the waters within Marine Parks and Marine Reserve.

4.5 Ecological Monitoring

Ecological monitoring is an important tool to effectively managing the Marine Parks and Marine Reserve. Apart from regular monitoring by staffs of AFCD, we have carried out scientific studies and ecological surveys in collaboration with local universities/ NGOs to better understand and update the baseline conditions of the ecological habitats/ species within Marine Parks and Marine Reserve. Examples of monitoring works include Water Quality Monitoring at the 4 Marine Parks and Marine Reserve, the Survey of Juvenile Fish Resources in the 3 Marine Parks at Northeastern Waters of Hong Kong, the Long-term Biological Monitoring at Sha Chau and Lung Kwu Chau Marine Park and coral monitoring in Marine Parks through annual Reef Checks. The information from monitoring are important to reflect the conditions of ecological important species, habitats and the marine physical environment which will give hints on the need of modification on recent management measures.

4.6 Education and Publicity

From 2009 to 2013, over 800 educational and publicity activities were organized, participated

by over 32,000 citizens. Among these activities, about 40% were targeted at schools while about 60% were from the general public.

The major education and publicity activities of Marine Parks are summarized as below:

- School Ecotour
- Marine Parks Ecological Field Studies
- Marine Parks School Seminar
- Marine Parks and Marine Ecology Public Seminars
- Hoi Ha Wan Marine Park Ecotour
- Marine Parks Ambassadors Scheme

5. Advice sought

This paper is prepared for members' information and comments, if any.

Country and Marine Parks Authority Agriculture, Fisheries and Conservation Department October 2013

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Figure 1



Figure 2

Map of Hoi Ha Wan Marine Park

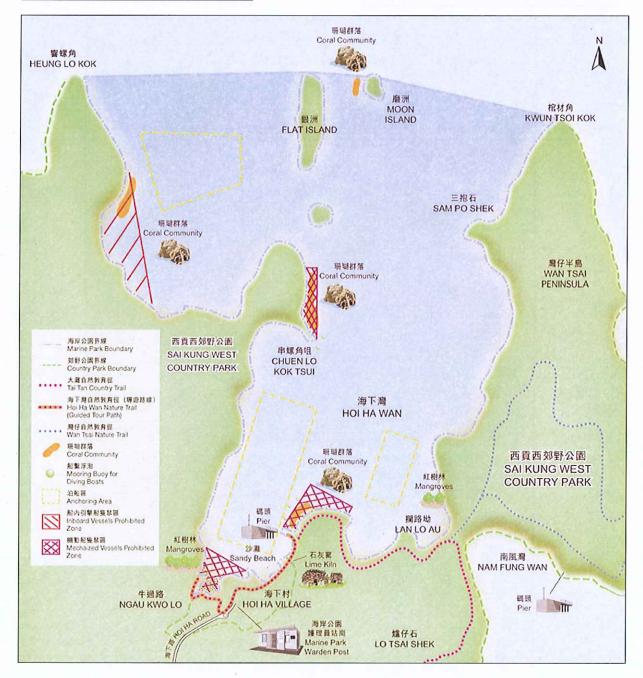


Figure 3

Map of Yan Chau Tong Marine Park

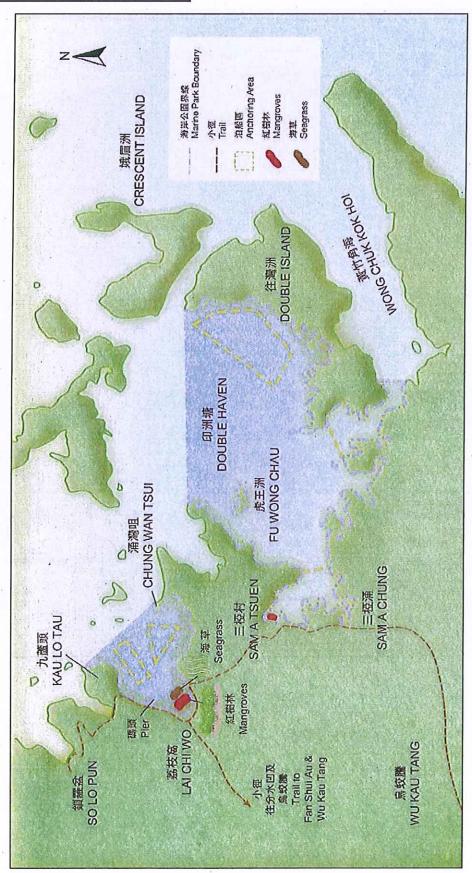


Figure 4

Map of Cape D'Aguilar Marine Reserve

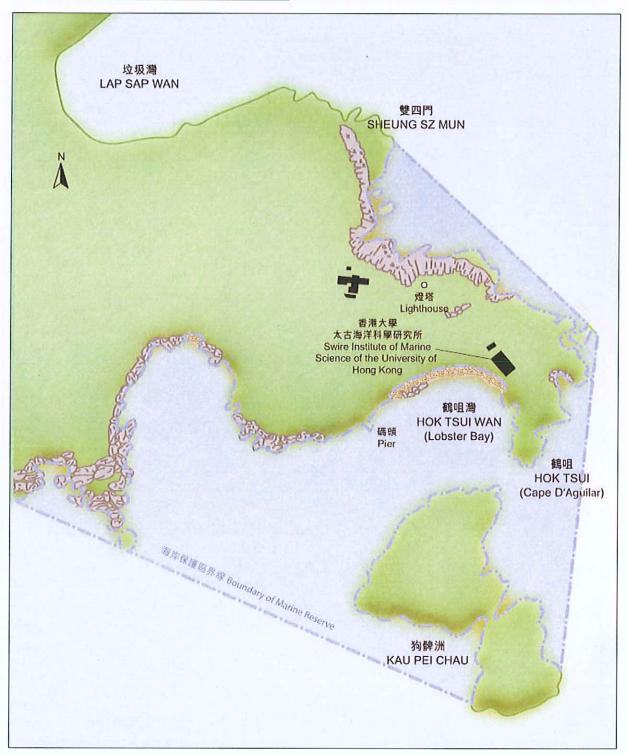


Figure 5

Map of Sha Chau and Lung Kwu Chau Marine Park

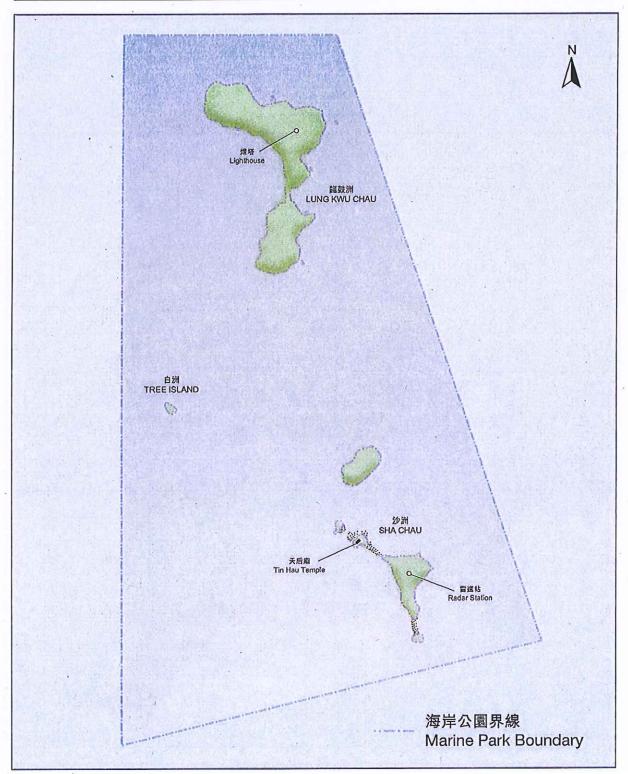


Figure 6

Map of Tung Ping Chau Marine Park

