High Speed Craft Consultative Committee Local Vessels Advisory Committee Pilotage Advisory Committee Port Operations Committee

<u>Updates on the Establishment of South Lantau Marine Park – Integration of Soko Islands Marine Park and Compensatory Marine Park for the Integrated Waste Management Facilities Phase 1</u>

1. Purpose

1.1 The purpose of this paper is to update Members on the latest development of the proposed Soko Islands Marine Park (SIMP) and compensatory marine park for the Integrated Waste Management Facilities Phase 1 (IWMF Marine Park) in South Lantau waters.

2. Background

Proposed Soko Islands Marine Park

2.1 In 2000, the Government announced a plan to designate the waters of Soko Islands as a marine park for the protection of Chinese White Dolphins (CWD) and the long-term conservation of local marine environment. To take forward the proposed plan, extensive consultation exercises were conducted in 2000-2002 and 2009 covering a diverse group of stakeholders. Afterwards, the Government made an announcement in early September 2014 to re-affirm its intention to the designation of SIMP. In 2014-2016, Agriculture, Fisheries and Conservation Department (AFCD) conducted a detailed study for the design and management of the proposed SIMP with a new round of public consultation. The up-to-date information re-confirms that the waters of Soko Islands is a unique location where both CWD and the Finless Porpoises (FP) are regularly sighted.

Proposed Compensatory Marine Park for the IWMF Phase 1

2.2 The proposed IWMF Marine Park is a mitigation measure for the IWMF Phase 1 project (the Project) conducted by the Environmental Protection Department (EPD). According to the recommendations of the relevant Environmental Impact Assessment Report and the condition 2.8 of the Environmental Permit (EP-429/2012/A) (the EP) issued for the Project, the establishment of the proposed marine park is to compensate for the potential permanent loss of important habitat for FP as a result of the proposed

reclamation works and breakwater construction for the Project. A detailed study was commenced in June 2015 to investigate the technical and practical aspects of the proposed IWMF Marine Park and to prepare for the submission of its detailed design.

3. Consultation with Marine Department Consultative Committees

- 3.1 The Marine Department Consultative Committees namely the Port Operations Committee (POC), the Local Vessel Advisory Committee (LVAC), the High Speed Craft Consultative Committee (HSCCC) and the Pilotage Advisory Committee (PAC) were consulted on the respective detailed design of SIMP and IWMF Marine Park, including the proposed boundary, management plan and fisheries enhancement measures, etc., during the period between 2016 and 2017.
- 3.2 The committee members had no objection on the boundaries of both the proposed SIMP and IWMF Marine Park. Key concerns raised by the committee members were related to marine traffic safety due to the boundary buoys for demarcating the proposed marine parks and the deployment of artificial reef within the core area of the SIMP as one of the fisheries enhancement measures.

4. Proposed Boundaries of Marine Parks

- 4.1 The proposed SIMP covers approximately 1,270 hectares of waters within which there is a core area of approximately 145 hectares (**Figure 1**). The core area is closed to all kinds of fishing activities with a view to conserving the fish stocks for the sustainability of fisheries resources in the proposed marine park and its surrounding waters.
- 4.2 Regarding the proposed IWMF Marine Park, the proposed boundary was derived taking into account the important FP habitats in the waters between Shek Kwu Chau and Soko Islands, fisheries resources, compatibility with existing, planned and potential marine facilities and future usage, size requirement and the future management of the marine park, which covers about 797 hectares of waters between Soko Islands and Shek Kwu Chau (**Figure 2**).
- 4.3 The two proposed marine parks adequately cover important habitats of CWD and FP as well as areas with moderate to high fisheries resources. The proposed boundaries have also avoided the identified Traffic Separation Schemes (TSSs) and areas with high density of marine traffic activities, and will not encroach on other existing, planned or potential marine facilities such as the South of Cheung Chau Sediment Disposal Area (**Figure 3**).
- 4.4 To achieve better synergy in the future management of the proposed SIMP and IWMF Marine Park, it is proposed to combine them into one single marine park of approximately 2,067 hectares, to be named as the South Lantau Marine Park (SLMP) (**Figure 4**). This approach will smoothen the designation and administrative procedures (e.g. optimising the boundary buoys), as well as facilitating the future management and operation of the marine park in terms of maintenance of facilities,

enforcement and patrolling, implementation of fisheries enhancement measures, etc. The proposed combination of marine parks would help address the concerns from relevant stakeholders (including marine users) regarding the marine park management issue.

5. Proposed Management Plan

- 5.1 The proposed SLMP will be managed and controlled in a similar manner as the existing marine parks in accordance with the Marine Parks Ordinance and the Marine Parks and Marine Reserves Regulation for conservation, recreation, education and scientific research purposes. Under the legislation, all vessels operating within the proposed SLMP will be required to adhere to a maximum speed limit of 10 knots. With the proper implementation and enforcement on vessel speed limit within the proposed SLMP, the potential impacts of existing vessel activities on marine mammals, which may include risk of injury and mortality from vessel collision and underwater acoustic disturbance, would be reduced.
- 5.2 The AFCD would be the key government department responsible for the operation, management and law enforcement of the proposed SLMP. An enforcement team will be set up for the proposed SLMP. While boundary buoys are essential to be installed for clear indication of the area of the proposed SLMP for the purposes of management and enforcement, the combination of the proposed SIMP and IWMF Marine Park into one single marine park could minimise the number of boundary buoys required to better address the concerns of members related to marine traffic safety. The AFCD would consult Marine Department view from navigational safety point of view on suitable ways to demarcate the waters and the core area of the proposed SLMP in a later stage.

6. Proposed Fisheries Enhancement Measures

- 6.1 In order to enhance the fisheries resources in the South Lantau waters as required in the EP issued for the IWMF Phase 1 project, deployment of artificial reefs (ARs) and release of fish fry / fingerlings have been proposed for the SLMP. The ARs are recommended to be deployed at the core area of the proposed SLMP where all fishing activities are banned, so that the enhanced fisheries resources can be adequately protected.
- 6.2 The ARs will be deployed on the seabed with water depth of approximately 13 to 15 m below Charted Datum (CD), a minimum clearance of 8 m below the CD from top of the AR structures will be maintained for navigational safety. The AR deployment location is shown in **Figure 5**. Appropriate monitoring studies on fish resources and structural aspects (for at least two years after deployment), including ARs location and available water depth over the ARs, will be conducted by the EPD to evaluate and review the effectiveness of the ARs. EPD would closely liaise with AFCD on the way forward of the monitoring based on the first 2-year monitoring results.
- Release of fish fry / fingerlings will be conducted at the deployed ARs to enhance the fisheries resources. Suitable native species with affiliation to ARs are proposed for

the exercise, which include commercially valuable native species such as orange-spotted grouper (*Epinephelus coioides*), yellowfin seabream (*Acanthopagrus latus*) and red porgy (*Pagrus major*). One species will be released at a time to avoid inter-specific competition. Appropriate monitoring studies (e.g. using hand-lining), will be conducted by the EPD for at least one year after release of selected fish species to evaluate and review the effectiveness of the release programme.

7. Potential Implication on Marine Usage

- 7.1 According to the Marine Parks and Marine Reserves Regulation, vessels speed should not exceed 10 knots within marine parks. Apart from the 10-knot speed limit, there is no special restriction or regulation on the entry or passing through the proposed SLMP including the core area for marine traffic. In addition, no person shall moor or anchor a vessel in a marine park except under and in accordance with a permit or at mooring buoys or mooring sites provided by AFCD.
- 7.2 The waters of the proposed SLMP are currently used by the public and the Government. The Marine Traffic Impact Assessment (MTIA) has identified no engagement of busy marine traffic within the waters of the proposed SLMP (**Figure 6**). According to the analyses of marine traffic density in the MTIA, a relatively low density of small craft and fast launches would be currently operated at a speed above 10 knots within the proposed SLMP. In addition to other alternative route options, the buffer zone of about 250 m to 750 m in width between the boundary of the proposed marine park and the nearby TSSs, as well as the buffer zone of at least 800 m in width between the proposed marine park and Hong Kong Special Administrative Region (HKSAR) boundary would also be expected to provide sufficient accommodation for the nearby marine traffic.
- 7.3 The proposed combination of two proposed marine parks into SLMP would not increase the proposed marine park area in total, but would minimise the number of boundary buoys required to better address the concerns related to marine traffic safety.

8. Way Forward

- 8.1 In November 2017, the Country and Marine Parks Board (CMPB) was consulted regarding the proposed boundary (including the combination plan), management plan and fisheries enhancement measures of SLMP. CMPB supported the proposal and the way forward.
- 8.2 The AFCD and the EPD will work closely together for the designation of the proposed SLMP in accordance with the statutory procedures as stipulated in the Marine Parks Ordinance, with an aim to completing the designation process as soon as possible.

9. Advice sought

9.1 Members are invited to note the latest plan to combine the compensatory IWMF Marine Park with the proposed SIMP to form the proposed South Lantau Marine Park.

Environmental Protection Department Agriculture, Fisheries and Conservation Department September 2019

Figure 1 Boundary of the Proposed Soko Islands Marine Park

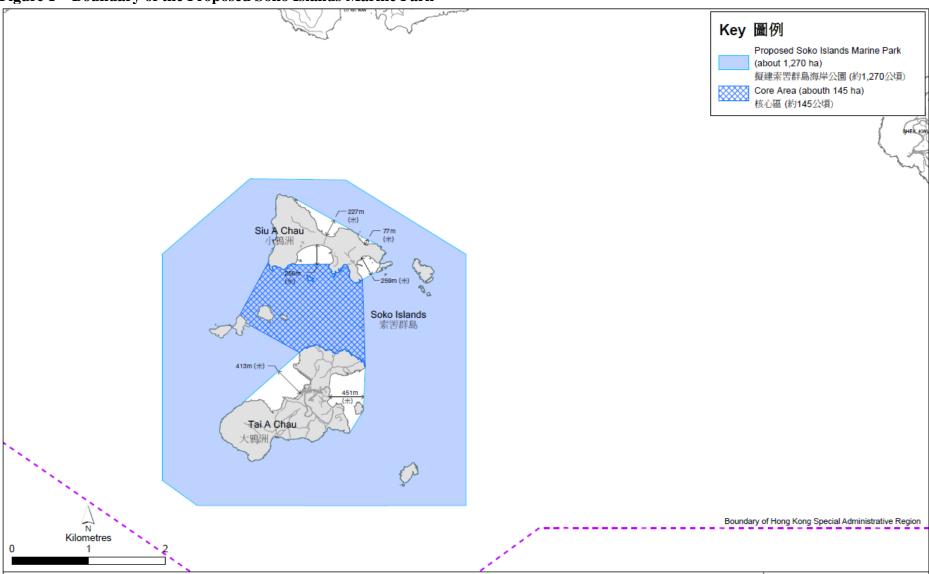


Figure 2 Boundary of the Proposed IWMF Marine Park 25 SOKO ISLANDS Key 圖例 Proposed Boundary of the Compensatory Marine Park for the IWMF Phase 1 擬建的綜合廢物管理設施第1期的補償 海岸公園 Boundary of Hong Kong Special Administrative Region 香港特別行政區邊界 Site Location for IWMF Phase 1 at an Artificial Island Kilometres 公里 位於人工島上的第一期綜合廢物管理設 2 施的位置

Figure 3 Key Considerations on Deriving the Boundaries of the Proposed Soko Islands Marine Park and IWMF Marine Park 圖例 Legend 位於人工島上的第一期除合 漁業資源調査區 Fisheries Survey Area 廢物管理設施的位置 IWMF Phase 1 Location Recommended Traffic Separation Schemes at South of Lantau ■ 海岸公園研究區 ■ Marine Park Study Area 建議大濠水道分道通航制 Recommended Lantau Channel ● 電纜登障站 Cable Landing Station 大嶼山 南長洲海泥卸置區 Open Sea Disposal Area for Disposal of Uncontaminated 低放射性廢物貯存設施 Low-level Radioactive Waste Traffic Separation Scheme Lantau Island 於中部水域的潛在人工島 Potential Artificial Island(s) in the Storage Facility Sediment at South Cheung Chau 疑議的索罟群島海岸公園 Proposed Soko Islands Marine Park Central Waters 大鴉洲梯台 Tai A Chau Landings 9 江豚棲息地指數 海底電纜 Submarine Cable Habitat Ratings of Finless Porpoises 擬議的大獎山西南海岸公園 1-5 輕微 Marginal Proposed Southwest Lantau Marine Park 海底管道 Submarine Pipeline 6-10 中等 Average 已刊檔的挖沙和卸泥區 Area Gazetted for Sand Dredging and Sediment Disposal 香港特別行政區邊界 Boundary of HKSAR 11-15 偏高 Above Average 第一期VMF補價性海岸公園選界 Proposed Boundary of the Compensatory Marine Park for the IWMF Phase 1 16-25 重要 Important 有挖泥約束的砂礦床 26-40 關鍵 Critical Sand Deposit - With Constraints on Dredging Cheung Chau 石鼓洲 Shek Kwu Chau 21 12 14 25 22 5 24 8 12 14 N Kilometres 公里 2

Figure 4 Boundary of the Proposed South Lantau Marine Park Key 圖例 Proposed Soko Islands Marine Park 擬建索罟群島海岸公園 Proposed Compensatory Marine Park for the IWMF Phase 1 擬建綜合廢物管理設施第1期的補償海岸 Boundary of Hong Kong Special Administrative Region Proposed South Lantau Marine Park 擬建南大嶼海岸公園 香港特別行政區邊界 Core Area: 145 ha (about) 核心區 (約145公頃) Site Location for IWMF Kilometres 公里 Phase 1 at an Artificial Island 位於人工島的第一期綜合廢物管理設施

的位置

