

COUNTRY AND MARINE PARKS BOARD

Summary Report of the Marine Parks Committee

1. Purpose

1.1 This paper aims to inform members of the major issues discussed at the Marine Parks Committee meeting held on 12 March 2019.

2. Proposed Artificial Reef Deployment in the Proposed South Lantau Marine Park

2.1 Having consulted the Country and Marine Parks Board on 24 November 2017, the Agriculture, Fisheries and Conservation Department (AFCD) and the Environmental Protection Department (EPD) proposed to combine the proposed compensatory marine park for the Integrated Waste Management Facilities Phase 1 and the proposed Soko Islands Marine Park into one single proposed marine park of approximately 2,067 hectares, to be named as the South Lantau Marine Park (SLMP), and proposed to release fish fry and deploy artificial reefs (ARs) within the SLMP as fisheries enhancement measures.

2.2 In the meeting, EPD and its consultant introduced to members the detailed design of ARs to be deployed in the proposed SLMP after its designation. Three reef sets comprising low and high profile ARs would be deployed in the Core Area of the proposed marine park, with a view to supporting the growth of marine organisms and protection for fish and thereby enhancing fisheries resources.

2.3 During the discussion session, EPD and its consultant noted members' concern on the stability and durability of the ARs proposed to be deployed, and explained that they had conducted marine ground investigation field works in the proposed AR deployment location to confirm the suitability and provide geotechnical parameters, including shear strength, consolidation and particle size distribution, for the design of AR. The ARs, which would be made of concrete and steel, should be

firm and durable. Besides, EPD would carry out appropriate monitoring, including fish resources and structural monitoring, to evaluate and review the effectiveness of the ARs on enhancing fisheries resources and to assess if lateral movement and settlement of the ARs are within acceptable limits.

2.4 The Chairman provided EPD with some technical advices, including the regulation of the pH value of the AR surface and installation of additional features on the AR units to accelerate the recruitment of marine organisms. Moreover, members invited EPD to maintain close communication with the relevant stakeholders, particularly the maritime industry and the fishermen community, with regard to both the proposed SLMP and AR deployment.

3. Fish Fingerlings Release in Yan Chau Tong Marine Park

3.1 AFCD briefed members on the proposal to release fish fingerlings of Hong Kong grouper (*Epinephelus akaara*) and star snapper (*Lutjanus stellatus*) in the Yan Chau Tong Marine Park (YCTMP) for restocking. Members supported the proposal, and some of them encouraged AFCD to consider also releasing a larger number of fingerlings of species at lower trophic level (i.e. not top predators) which commonly occur in the water of concern in future events for a more long-lasting result on the enhancement and restoration of marine fisheries resources.

3.2 Members also welcomed the trial on the use of passive acoustic telemetry to track the fingerlings and provided some suggestions in this regard. Since it would be the first time passive acoustic telemetry being used in Hong Kong to track fish fingerlings, some members suggested AFCD to test this tracking method in a controlled environment (e.g. the aquarium of Ocean Park) before commencing the trial in the sea. Members also suggested AFCD to inform the fishermen operating near YCTMP as well as members of the public about the restocking and provide incentives for them to return the tagged fishes to AFCD if they incidentally caught them. AFCD welcomed these suggestions.

4. Consultancy Study on Reef Fish Diversity in Hong Kong

4.1 AFCD commissioned a 24-month consultancy study on the diversity and distribution of reef fishes in Hong Kong (the Study). The Study commenced in

September 2017 and the field work will be completed around August 2019. In the meeting, the Study team from the State Key Laboratory of Marine Pollution, City University of Hong Kong, briefed members on the objectives, scope and methodology of the Study and some preliminary findings from the surveys in the past four quarters.

4.2 During the discussion session, the Study team answered questions from the Chairman and members, most of which were about the survey method. The Chairman suggested the Study team to include in the final report an analysis on the number and distribution of alien species and the percentage change in the number of tropical and temperate fish species, as warming of seawater driven by the climate change might increase the number of tropical species migrating into Hong Kong waters.

5. Advice sought

5.1 This paper is prepared for members' information.

Country and Marine Parks Authority
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