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 (MPC) meeting held on 3 December 2020.

2. A Study on Juvenile Fish Resources at Marine Parks and Marine Reserve - Results and Conclusion

2.1 The Agriculture, Fisheries and Conservation Department (AFCD) commissioned the State Key Laboratory of Marine Pollution, City University of Hong Kong to carry out a study on the juvenile fish resources in Hong Kong (The Study). The Study, which commenced in the second quarter of 2018, aimed to assess the juvenile fish resources using a variety of sampling methods, compare the results with a previous study conducted in 2012-2014 and make recommendations on management and monitoring. Representatives of the State Key Laboratory of Marine Pollution attended the meeting and briefed members on the study area, sampling methods, study results, and recommendations in relation to the management and monitoring of juvenile fish resources.

2.2 Members noted that the Study identified 16 new juvenile fish species records in Hong Kong, bringing the total local juvenile fish record to 292 species. The Study also found rich juvenile fish species diversity in the studied marine protected areas, including Hoi Ha Wan Marine Park (HHWMP), Tung Ping Chau Marine Park (TPCMP), Yan Chau Tong Marine Park (YCTMP) and Cape D'Aguilar Marine Reserve. Among them, seagrass bed and mangrove bed at YCTMP and *Sargassum* bed at TPCMP had particularly high juvenile fish diversity and were important habitats for juvenile fishes.

2.3 Regarding the recommendations in relation to the management and monitoring of juvenile fish resources, members suggested that future monitoring

should also consider covering the western waters of Hong Kong. Besides, some members were interested in the relationship between occurrence of new fish species and climate change, and recommended AFCD to consider examining the trend in abundance of the tropical and temperate fish species in Hong Kong waters if funding was available. Moreover, members supported publishing the study findings in scientific journal(s) and suggested sharing the findings with the public through the "Hong Kong Marine Classroom" platform and the soon-to-open Hoi Ha Visitor Centre as well, to enhance public understanding of the marine environment of Hong Kong. AFCD responded positively to the suggestions.

3. Enhancing Coral Restoration Success in Hoi Ha Wan Marine Park with 3D-printed Reef Tiles

3.1 The project team from the Swire Institute of Marine Science, The University of Hong Kong brief members on the progress on the deployment of 3D-printed artificial reef tiles in HHWMP. The reef tiles were deployed at Moon Island, Coral Beach and the sheltered bay next to the Jockey Club HSBC WWF Hong Kong Hoi Ha Marine Life Centre for different purposes. The project team also briefed members on the preliminary results of deployment at Coral Beach, which was an experimental site for testing restoration success of monoculture and polyculture approaches.

3.2 During the discussion session, the project team answered members' questions concerning the details of the reef tiles deployment, the methods and tools to monitor the biodiversity of the reef tiles, and the considerations for deployment in a larger scale. Members appreciated the project's contribution to the coral restoration in HHWMP and enhancement of understanding of the efficiency of artificial reef tiles in facilitating coral restoration and biodiversity enhancement.

4. Advice sought

4.1 This paper is prepared for members' information.

Country and Marine Parks Authority February 2021