To: 6/F Cheung Sha Wan Government Offices,
303 Cheung Sha Wan Road, Kowloon
Agriculture, Fisheries and Conservation Department
Country Parks Recreation Development Division
c/o: Dr. TAM Tze Wai (Sr. Country Parks Officer)

and

3/F Manulife Place, 348 Kwun Tong Road
Kwun Tong, Kowloon
Mott MacDonald
c/o Mr. Gary Chow (Technical Director)

Cc: 6/F Cheung Sha Wan Government Offices,
303 Cheung Sha Wan Road, Kowloon
Agriculture, Fisheries and Conservation Department
Mariculture and Special Projects Division
c/o: Mr. CHOW Wing Kuen (Sr. Fisheries Officer)

By email

22nd October 2025

Dear Dr. Tam and Mr. Chow,

Re: Joint Green Group Submission on the Development of Coastal Protection Park at Tsim Bei Tsui/Lau Fau Shan/Pak Nai

To begin with, we would like to thank AFCD and Mott MacDonald for inviting us to the Coastal Protection Park (CPP) focus group meeting on August.

It is well established that Deep Bay hold high ecological and cultural values, housing Hong Kong's largest intertidal mudflats, natural oyster reefs, mangrove stands, reedbeds and *Halophila beccarii* seagrass beds, the largest population of endangered juvenile Chinese Horseshoe Crab in Pak Nai. The Inner Deep Bay and Shenzhen River catchment area has also been recognized as an 'Important Bird Area', which means that it supports large numbers of passage and wintering waterbirds including threatened species. Apart from that, Deep Bay also has a long history (at least 250 years) of traditional oyster farming in Lau Fau Shan, which has been recognized as part of Hong Kong's intangible cultural heritage (ICH).

Since 2017, we have been pioneering coastal habitat restoration, working closely with local communities across Deep Bay to develop long-term solutions for conservation and sustainable development. This includes rehabilitating Deep Bay's oyster reefs to restore their ecological, social and cultural values, while helping the oyster aquaculture industry become more sustainable. We have built strong relationships with traditional oyster farmers and local community in Ha Tsuen, and collaborated with academic partners to understand the ecological, economic and social value of Deep Bay's estuarine ecosystems. Given our strong relationship with local conservation and community stakeholders, and our track record in conservation outcomes, we have developed the following **seven guiding principles** for the planning and management of the future CPP, to achieve the shared vision of **building the city into a sustainable city where people and nature thrive. We aspire to make the CPP a world-class conservation park that showcases a well-managed protected area, that supports and restores thriving climate-resilient ecosystems, promotes equitable development, respects local communities, supports traditional livelihoods and connects people with nature through quality ecotourism.**

To achieve this shared vision, we jointly recommend:

1. **Spatial planning and zoning management**

   To ensure ecological integrity and connectivity, as well as resilience to climate change and projected sea level rise, diversity of habitats (e.g. traditional ponds, *Gei Wais*, watercourses, mudflats, seagrass beds, oyster reefs and mangrove communities) should be maintained to benefit biodiversity. The land-side CPP should cover the Tsim Bei Tsui and Pak Nai areas, and, at very least, some areas in between Tsim Bei Tsui and Pak Nai to enhance the ecological connectivity for terrestrial and coastal ecosystems, while the sea-side CPP should cover **the whole area of Short Term Tenancy (STT) 2266,** and all nearby Sites of Special Scientific Interest (SSSIs). In defining the breadth of land-side CPP (how far it should expand inland), climate projections should be fully considered in planning to avoid coastal squeezing from sea-level rise, leaving enough buffer for the intertidal area to persist.

   The recommendation of expanding the sea-side CPP to cover the whole STT2266 has also been endorsed by Ha Tsuen Tang's Yau Gong Tong, the owner of the STT, and three other oyster farming associations. Please refer to our email submission on 3rd October, for more information.

1.1. **Sea-side CPP**

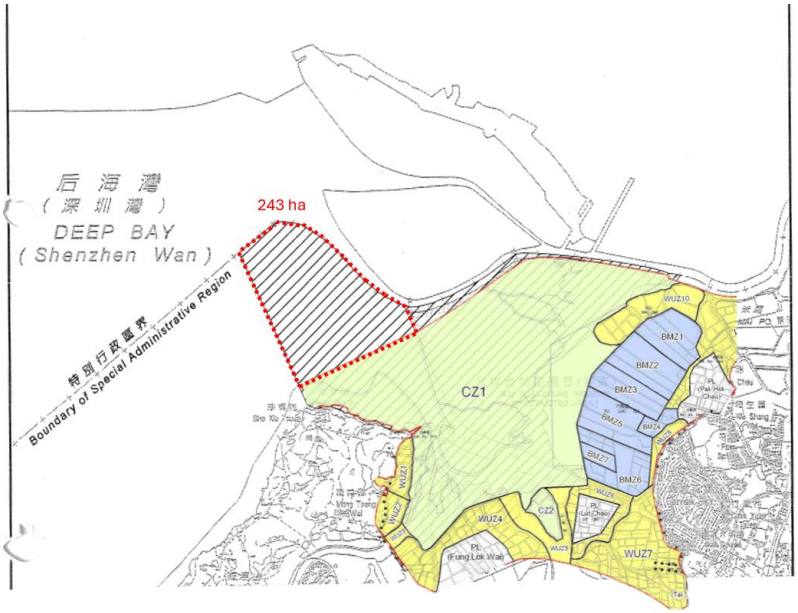
Within the sea-side CPP, we recommend two levels of zoning management, i.e. core conservation zones (level 1, with highest level of protection) and biodiversity management and wise-use zones (level 2).

Protection Level 1 – Core conservation zones

We recommend that the intertidal areas of Pak Nai and Tsim Bei Tsui should be designated as core conservation zones. These should include public no-go zones to protect horseshoe crab hotspots and seagrass beds from trampling and recreational harvesting and should control visitor numbers to minimize impacts on birds, especially in areas near their nests and roosting sites. Core conservation zones should exclude any oyster farming activities on the intertidal areas and implement active habitat management, invasive species management, marine litter control and regular ecological surveys. Larger-scale infrastructure (including visitor centers and park ranger posts), should be avoided, while small-scale installations like educational panels and bird hides should also be carefully assessed under existing EIA procedures. This Level 1 zoning would align with the expansion of marine protected areas (MPAs) in Hong Kong as listed in Biodiversity Strategy and Action Plan (BSAP) consultation document.

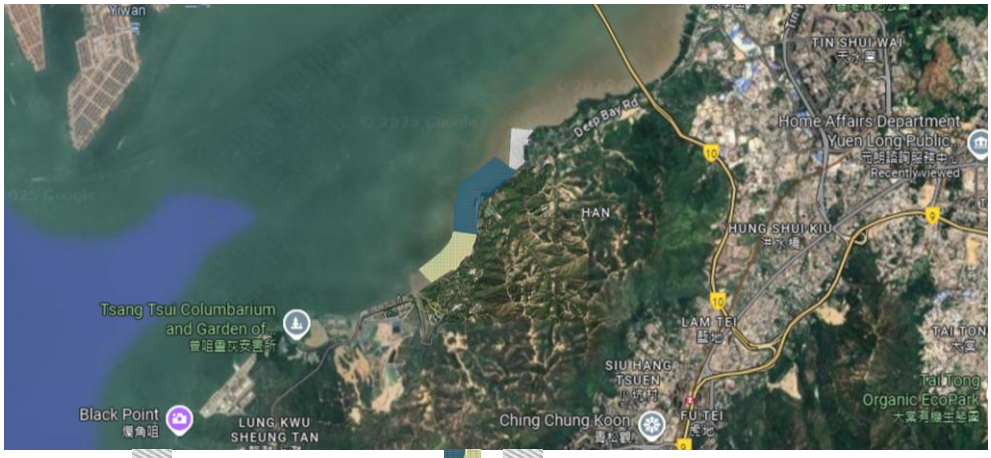
[Key: = proposed seaside CPP]

Proposed sea-side CPP that cover the whole STT2266 (app. 2452ha)



[Key: = proposed core conservation zone and SSSI, + = Ramsar site and SSSI]

Proposed Tsim Bei Tsui core conservation zone, areas that are now within the SSSI but out of Ramsar areas (app. 243ha)



[Key: = SSSI at Sheung Pak Nai, + = proposed core conservation zone]

Proposed Pak Nai core conservation zone, include SSSI at Sheung Pak Nai, Pai Nai and Ha Pak Nai (app 100ha)

Protection Level 2 – Biodiversity management and wise-use zones

Most of the proposed sea side CPP areas would fall under this level of zoning, which we suggest also include subtidal areas of STT area so that oyster farming management can be applied holistically in an integrated manner. Wise-use zones should include management measures that support biodiversity, serve as ecological corridors to allow movement between core conservation zones, and allow a higher degree of controlled and coordinated human activities that follow sustainable management practices, e.g. sustainable farming, *Gei Wai* operation, controlled ecotourism and environmental education activities. Restorative aquaculture (farming practices that provide ecosystem services and enhance biodiversity) should be promoted in both subtidal areas and intertidal areas where active traditional benthic oyster farming is still practiced, with the added benefit of preserving traditional cultural heritage.

Oyster reef and other habitat restoration should be conducted in core conservation areas (Level 1 Zone). Inclusive community-based conservation should be adopted to co-manage this zone. This Level 2 zoning would align with the adaptation of various conservation initiatives, e.g. other effective area-based conservation measures (OECMs), in Hong Kong as listed in the BSAP consultation document. Scientific monitoring should be conducted regularly to assess the biodiversity and ecological health of Level 1 & 2 Level zones.

1.2. **Land-side CPP**

Protection Level 2 – Biodiversity management and wise-use zones

We recommend that, at a minimum, the existing Coastal Protection Areas (CPA), under the 'Sheung Pak Nai & Ha Pak Nai (S/YL-PN/9)', 'Lau Fau Shan & Tsim Bei Tsui (S/YL-LFS/11)', and 'Ha Tsuen Fringe (S/YL-HTF/12)' Outline Zoning Plans, located on the northern and western sides of Deep Bay Road and Nim Wan Road from Tsim Bei Tsui to Pak Nai, should be designated as the land-side CPP. Considering the existing settlements in Lau Fau Shan and Sha Kiu village, which have great potential to engage in future eco-tourism, e.g. demonstration of ICH of oyster farming technique, these areas should be carefully planned and managed to promote ecological connectivity and urban-rural integration. Most of the proposed land side CPP areas would fall under this level of zoning.

[Key: = proposed land side CPP, areas potential to be included in land-side CPP/to be planned and managed carefully to make sure the ecological connectivity is maintained]

Proposed land-side CPP, the TBT to LFS section should be app. 36.5ha while the LFS to PN section should be at least app 109 ha.

Protection Level 3 – Buffer zones

Buffer zones should be designated for areas with existing hard infrastructure, e.g. village houses, playgrounds, water treatment facilities, roads etc, adjacent to Level 1 and Level 2 zones. As these areas produce higher levels of human disturbance, stringent environmental management measures should be implemented, e.g. target on water, noise and light pollution to mitigate negative impacts on the surrounding ecology.

2. Ensure ecological connectivity and increase resilience to climate change

2.1. Ensure continuity and connectivity between existing and proposed protected areas in Deep Bay between land and sea and between Hong Kong and Shenzhen, providing sanctuaries and ecological corridors for wildlife and increasing the climate resilience of these ecosystems.

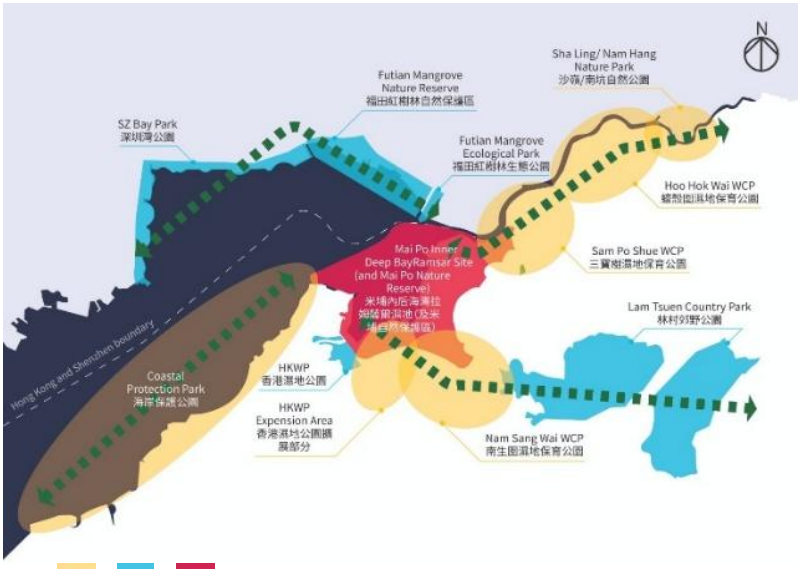
2.2. Adopt a Ridge to Reef approach, areas surrounding CPP must also act as buffers with conservation measures that can ensure connectivity and ecological integrity of the CPP. This includes restoring forests in degraded hillside badland areas.

2.3. Retain and diversify wetland habitats to protect ecosystem services and improve resilience to climate change and sea level rise.

2.4. Incorporate climate modelling to predict sea-level rise and its impact on the integrity of the different CPP habitats and allow sufficient buffer area to avoid coastal squeezing.

2.5. Explore the potential for Nature-based Solutions to mitigate climate risks for surrounding villages and vulnerable communities.

2.6. Cross border collaboration and exchange between Hong Kong and Shenzhen for a more holistic approach on managing the Deep Bay/Shenzhen Bay watershed.



[Key: + + = various types of existing and proposed protected areas, = illustration of the ecological corridors]

Illustration of CPP connectivity with nearby protected areas, providing ecological corridors for wildlife for increased resilience to climate change.

3. Carry out habitat management, restoration and scientific monitoring

3.1. Develop a robust and detailed management plan for the whole of the CPP.

3.2. Habitat restoration: Fishpond and *Gei Wai* rehabilitation and management, oyster reef restoration, seagrass restoration (as well as reforestation of barren hillside outside CPP).

3.3. Endangered species monitoring, reforestation of hillside badlands and promotion of urban forests in built up areas surrounding CPP.

3.4. Active management of invasive species (e.g. *Spartina* sp. and *Sonneratia* spp.).

3.5. Clean-up of debris and marine plastics.

3.6. Water quality control and monitoring (avoid polluting farming practices, promote organic farming, monitor pathogens).

3.7. Identify and address scientific knowledge gaps (including migratory bird count and adult horseshoe crab tracking).

3.8. Cross-border collaboration for water quality control, migratory bird count and invasive species removal.

3.9. Carrying capacity study on the level and intensity of tourism activities for different zones of CPP.

4. Promote inclusive governance and community-based conservation

4.1. Respect indigenous and traditional community visions and voices in the CPP planning.

4.2. Form a CPP Advisory Committee with government, academics, conservation experts, oyster farming association representatives, local community stakeholders to ensure transparent decision-making and local and indigenous community input into governance.

4.3. Support, incentivize and prioritize local communities to take up CPP nature stewardship responsibilities, e.g. assist with management and enforcement of protection measures in the CPP.

4.4. Prioritize ecotourism development opportunities that benefit indigenous and local communities.

5. **Develop low-impact, regulated and equitable ecotourism**

5.1. Adopt globally accepted definitions and principles for ecotourism, (i.e. IUCN and UN's definitions), promoting low-impact, regulated and coordinated ecotourism activities that contribute to conservation outcomes, support local community livelihoods and preserve traditional cultural heritage.

5.2. A detailed carrying capacity study should be undertaken to manage negative impact tourism may have on sensitive ecology areas Develop detailed regulations of tourism activities, with the level of regulation varying for different zones within the CPP (core conservation areas vs biodiversity management and wise use areas etc).

5.3. Promote and support local farming culture and ICH (for e.g. traditional oyster farming) within dedicated infrastructure (visitor centers etc) and thematic events (e.g. oyster and other harvesting festivals etc).

5.4. Low impact infrastructure: Choose low-cost eco-friendly facilities to minimize trampling on mudflats and seagrass beds while allowing visitors to safely observe wildlife.

5.5. Develop financial incentives for local communities to encourage villagers to develop ecotourism activities that benefit conservation.

5.6. Prioritize local community employment. Incentivize and train local communities to participate in conservation and establish an eco-guide training and certification system.

6. Adopt best management practices for restorative oyster farming, sustainable fishponds and *Gei Wai* aquaculture

6.1. Develop financial incentives and subsidies schemes to promote sustainable farming practices and enhance the competitiveness of local agricultural and fisheries products.

6.2. Promote the consumption of local products within hospitality sector, farmers markets, and work with Culture, Sports and Tourism Bureau to organize thematic festivals or events.

6.3. Promote local community capacity building for ecotourism development, e.g. training programs and tours guide certifications.

6.4. <u>Oyster farming</u>

6.4.1. Develop best management practices and guidelines to promote sustainable and/or restorative aquaculture.

6.4.2. Optimize and adapt raft density within ecological carrying capacities with Tang's Yau Gong Tong and all oyster farming associations' endorsement and support. Strategic raft removal and expand new tenancy zones: Raft removal should be focused on less productive zones (e.g. outer bay). Expanding tenancy zones in the inner bay could help reduce raft density and mitigate eutrophication risks.

6.4.3. Set up a centralized oyster shell recycling scheme to avoid unsustainable disposal of shell debris on the shoreline.

6.4.4. More stringent water quality control: Effective wastewater control in the entire catchment area is essential to maintain water quality, oyster produce safety and ecological integrity. Cross border collaboration: Work with Shenzhen municipality to improve wastewater management that has a negative impact on oyster productivity.

6.4.5. Implement Long-term monitoring: continuous data collection for sustainable oyster farming management. A robust monitoring framework will support adaptive strategies and long-term viability for oyster farming in Deep Bay.

6.4.6. Financial support and incentives for oyster farmers to develop ecotourism activities as alternative livelihoods given the reduction in raft area under the STT2266 area within the CPP.

6.5. <u>Sustainable fishponds and *Gei Wai* farming</u>

6.5.1. Implement sustainable fishponds and *Gei Wai* farming best practices, e.g. the management measures developed under HKBWS's HK Fishpond Conservation Scheme whereby operators are required to adopt a traditional and ecologically sustainable operation regime to manage fishponds (drain-down, to provide suitable feeding and roosting habitats for birds etc).

6.5.2. Retain and diversify coastal wetland habitats (e.g. traditional fishponds and *Gei Wais*) to protect the wetland ecosystem services and increase resilience to climate change. Recreational fishponds with limited ecological value should be limited within the CPP.

6.5.3. Promote brackish *Gei Wai* for ponds that are in close proximity to the sea, as if the water level of *Gei Wais* are controlled well, it could reduce the effect of flooding during extreme weather events and typhoons.

7. Ensure sustainable conservation financing

7.1. Blue debt and concessional blue loans

7.1.1. Blue bonds and loans: Government-issued bonds are generally used for public infrastructure. Private sector bonds are used for investment in revenue generating businesses such as sustainable seafood industries.

7.1.2. Blue debt supports marine related businesses by ensuring sustainable use of marine resources, as well as investing in the protection of marine ecosystems.

7.1.3. The Government-should provide incentives to encourage current recreational fishpond operators to convert their ponds into traditional fishponds or *Gei Wais*, supporting local ecotourism initiatives and enhancing biodiversity.

7.2. Conservation Trust Funds

7.2.1. Establishing a trust fund for long-term conservation financing of marine protected areas (MPAs) and conservation zones. The initial endowment would likely require a blend of government and philanthropic contributions which is then independently managed, generating returns for ongoing conservation efforts.

The adoption of these guiding principles will safeguard the ecological integrity of Deep Bay and demonstrate how a well-managed protected area can support sustainable development of the Northern Metropolis.

If you have any questions or need clarification on these recommendations, feel free to contact TNC Community Conservation Manager at tom.chan@tnc.org .

Yours Sincerely,
ADM Capital Foundation
Green Power
Hong Kong Seagrass Restoration Association
The Conservancy Association
The Hong Kong Bird Watching Society
The Nature Conservancy Hong Kong Foundation Ltd
World Wide Fund for Nature Hong Kong
Prof. Bayden D. Russell of The University of Hong Kong
Prof. Cindy Lam of The Hong Kong University of Science and Technology
Prof. Cynthia Yau of The Hong Kong University of Science and Technology
Prof. JD GAITÁN -ESPITIA of The University of Hong Kong
Prof. S.G. Cheung of City University of Hong Kong
Prof. Tommy Hui of Lingnan University
Dr. Christelle Not of The University of Hong Kong
Dr. Connie Ng of Hong Kong Maritime Museum