

Confirmed Minutes
38th Nature Conservation Subcommittee Meeting
held on Monday, 4 December 2023 at 2:30 p.m.

Present:

Dr Theresa KWONG (Chairman)
Ms Carmen CHAN, BBS, JP
Ms Ada FUNG, BBS
Prof Kenneth LEUNG, JP
Prof WONG Kam-bo
Ms Karen CHEK (Secretary)

Absent with Apologies:

Dr William YU

In Attendance:

Environment and Ecology Bureau (EEB)

Mr Alan LO, JP	Deputy Secretary for Environment and Ecology (Environment) 2
Mr Desmond WU	Principal Assistant Secretary for Environment and Ecology (Nature Conservation)
Miss Sophia HUI	Assistant Secretary for Environment and Ecology (Nature Conservation) 1
Miss Sally SHEK	Executive Officer (CBD) 1
Miss Avynn WONG	Executive Officer (CBD) 2

In Attendance for Item 2:

EEB

Mr Simon WANG	Principal Manager (Conservation in Northern Metropolis)
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Agriculture, Fisheries and Conservation Department (AFCD)

Mr Eric LIU	Senior Conservation Officer (Technical Services)
Dr Evelyne KUO	Conservation Officer (Wetland) 1
Ms Scarlet CHENG	Conservation Officer (Wetland) 2

AECOM

Mr Freeman CHEUNG	Senior Vice President
Dr David GALLACHER	Executive Director

Ms Sally TANG
Ms Iris FOK

Graduate Environmental Consultant
Engineer

In Attendance for Item 3:

AFCD

Mr SHEK Chung-tong
Mr Philip YIP

Senior Fauna Conservation Officer (Acting)
Fauna Conservation Officer (Operation) 2

Action

The Chairman welcomed Members for attending the meeting. She informed the meeting that Dr Wong Kwok-yan had resigned from the Nature Conservation Subcommittee and apologies of absence had been received from Dr William Yu.

Item 1 : Matters arising

2. The Chairman advised Members that the minutes of the last meeting held on 8 June 2023 were confirmed by circulation on 20 July 2023.
3. There was no matter arising from the minutes of the last meeting.

Item 2 : Strategic Feasibility Study on the Development of Wetland Conservation Parks System (ACE-NC Paper 2/2023)

4. The Chairman indicated that the paper sought Members' views on the preliminary recommendations of the strategic feasibility study on the development of the Wetland Conservation Parks (WCPs) System commissioned by AFCD ("the Feasibility Study").
5. There was no declaration of interest by Members.

(The presentation team joined the meeting at this juncture.)

6. Mr Eric Liu gave an opening remark on the background of the study and Dr David Gallacher briefed Members, by way of a PowerPoint presentation, on the baseline reviews of the conditions of the study area, proposed positioning and functions of the WCPs, potential management options, phased approach for development and proposed development plan of the Sam Po Shue (SPS) WCP.

Scope of Development

7. Addressing a Member's question on the proposed size of the SPS WCP, Mr Eric Liu remarked that the Northern Metropolis Development Strategy (NMDS) was

a strategic report, and the area of SPS WCP, i.e. about 520 hectares (ha), mentioned in the NMDS was only a preliminary estimation without detailed study. The Feasibility Study found that some lands originally included for SPS WCP in the NMDS were land of Lok Ma Chau Control Point, parts of Shenzhen River, as well as wetlands already used for compensation for other development projects, etc. As a result, the area suitable for the development of the SPS WCP was reduced to about 338 ha. On the Member's further enquiry on the development of the Tsim Bei Tsui/Lau Fau Shan/Pak Nai Coastal Protection Park, Mr Liu clarified that the delineation of this project was being examined under another study commissioned by the Planning Department and Civil Engineering and Development Department, and was outside the scope of the Feasibility Study.

8. Mr Eric Liu further explained that the NMDS proposed to establish five new parks, namely SPS WCP, Nam Sang Wai WCP, Hoo Hok Wai WCP, Hong Kong Wetland Park Expansion Area, and Sha Ling/Nam Hang Nature Park. However, the area of the proposed Sha Ling/Nam Hang Nature Park identified in the NMDS was only about 4 ha, around 90% of which consisted of existing compensatory wetlands already managed by AFCD. As such, the Feasibility Study recommended incorporating the area originally proposed for the Sha Ling/Nam Hang Nature Park into the Hoo Hok Wai WCP, such that a more comprehensive and effective management strategy could be formulated for wetland conservation in the area.

Timeline

9. The Chairman and two other Members held the view that the Government should expedite the overall development timeframe of the WCPs System. Members considered that it would be desirable to advance the construction works on the Government land in SPS WCP as far as possible, and commence the preparation work for the remaining WCPs as early as possible. One of the above Members opined that the Government should provide a clear timeframe for the development of all parks under the WCPs System and promulgate the information to the public in one-go.

10. Considering the unprecedented scale of the WCPs System, Mr Eric Liu explained that the study suggested that it would be pragmatic for the Government to develop the WCPs System in phases, with a view to ensuring that the planning, design and construction work could be undertaken in a comprehensive and proper manner, and that the impacts on the stakeholders could be thoroughly considered and managed. Mr Liu supplemented that the size of SPS WCP would be about five times larger than the existing Hong Kong Wetland Park, the construction of which took seven years to complete. He further added that for Government land, the Government

would still need to go through the land clearance procedures with the existing land users before the land would be available for the development of SPS WCP.

11. Noting that the investigation study for the development of SPS WCP to be undertaken in the next stage would take about two to three years, a Member suggested that AFCD should also expedite the study and consider some quick-win solutions. Notwithstanding the statutory requirements including EIA studies, planning applications, ground investigation works, and geotechnical, traffic, ecological and other technical studies etc. that needed to be completed during the investigation stage, Mr Eric Liu said that AFCD would strive to speed up the process as far as possible.

Stakeholders' Views

12. A Member enquired about the potential impacts of the proposed parks on the relevant stakeholders such as aquaculture operators. He sought to have more details about the study findings including the pros and cons of the existing aquaculture practices as well as the relevant stakeholders' views on the development of the WCPs System.

13. Mr Eric Liu shared that some ecologically friendly fish ponds practising traditional aquaculture would be retained while modernised aquaculture would also be introduced in the parks, with a view to enhancing the ecological function of the fishponds while developing modernised aquaculture industry in the WCPs System. He said that the SPS WCP would be positioned for "Biodiversity and Aquaculture in Harmony", whereas the other parks would have more eco-education and recreation functions, while still achieving the objectives of ecological conservation and sustainable development of aquaculture. He assured Members that AFCD would continue to maintain close communication with the stakeholders such as the aquaculture operators to consider their views in the next stage.

14. Highlighting the aging population of the aquaculture operators in Hong Kong, a Member suggested that AFCD should formulate policies or measures to support the trade by encouraging the younger generation to join the aquaculture business for the long-term and sustainable development of the industry. Another Member suggested that AFCD should quantify the expected benefits of the WCPs such as increase in aquaculture productivity for public information. Mr Eric Liu indicated that the Government would publish a Blueprint for the Sustainable Development of Agriculture and Fisheries which would outline a comprehensive plan to support and promote the development of local agriculture and fisheries industries, and the relevant information should be available shortly.

(Post-meeting note: the Government released the Blueprint for the Sustainable Development of Agriculture and Fisheries on 14 December 2023.)

Land Use Planning

15. With reference to a Member's enquiry about potential change in the proportion of land use after the development of WCPs System, Mr Eric Liu responded that substantial change was not expected. He added that AFCD would conduct more detailed studies to explore the possibility of further enhancing the ecological value of some areas, such as through restoring brown fields into natural habitats like fish ponds.

16. Two Members enquired about the private to public land ratio in the SPS WCP area, the pros and cons of the public-private partnership (PPP) model, the Government's detailed plan to implement the PPP model in the WCPs and measures to tackle the potential problems. Mr Eric Liu advised that around half of the land of the SPS WCP was private land and details of the PPP arrangements were to be explored in the next stage.

17. In response to questions from three Members on the experiences of overseas examples in managing conservation areas through the PPP model, in particular with regard to incentives for the private land owners to join the PPP projects, Dr David Gallacher shared an established and cost-effective way to manage land of conservation interest through PPP in North America, where the private land owners would be required to abide by certain land use requirements to maintain the ecological value of the land, but they could retain the land ownership while the management responsibilities could be implemented by other parties through the set-up of a trust that provided the necessary funding. One of the above Members expressed that conditions should be included to require the private land owners to provide recreation or eco-education elements in the WCPs. Mr Eric Liu thanked Members for their comments and indicated that AFCD would explore feasibility of different PPP models in the WCPs.

Ecological Function

18. A Member remarked that AFCD should conduct a baseline study of the sensitive species to facilitate evaluation and comparison of the ecological impact before and after the development. Mr Eric Liu responded that a number of ongoing baseline ecological studies were available for reference. He also supplemented that the "no-net-loss in wetland" principle was stipulated in the Town Planning Board Guidelines No. 12C for the consideration of development proposals in the Deep Bay

Area, where no decline in wetland or ecological functions served by the existing fish ponds, especially as a source to provide abundant and accessible food and roosting grounds to ardeids and other species, should occur. He explained that no-net-loss could be in terms of ecological function or size of the area concerned. With reference to the past EIA projects, a comparison of the quantity of sensitive species such as birds could be an indicator to assess whether there was a loss in ecological function.

19. A Member suggested that AFCD should create diverse mosaic of habitats in the WCPs, including planting more mangroves in suitable locations in view of their additional carbon sequestration function. The Member enquired about the proportion of different microhabitats in the WCPs as he was concerned about the size and locations of the areas designated for modernised aquaculture. He opined that it would not be beneficial to the ecology if the majority of the areas were allocated for aquaculture. Mr Eric Liu thanked the Member for his suggestions and said that more details about the distribution of habitats would be provided in the EIA report of the San Tin / Lok Ma Chau Development Node. He advised that most of the aquaculture activities in the WCPs would be ecologically friendly as the fish ponds would serve dual functions of ecological conservation and aquaculture, and added that smart technology would be deployed to help boost the productivity of the traditional fish ponds.

20. On a Member's question about carbon neutrality, Mr Eric Liu responded that AFCD would incorporate suitable designs such as nature-based solutions in the development of the WCPs System, with a view to contributing to carbon neutrality.

21. A Member suggested that AFCD should consider carefully to strike a balance between enhancing the accessibility of the WCPs while avoiding human disturbances to the nature. The Member added that overnight eco-tourism activities with appropriate control measures should be allowed for members of the public to experience the countryside at night. Mr Eric Liu thanked the Member for her suggestion and indicated that the Government would explore the possibility of facilities to accommodate overnight eco-tourism activities in the WCPs bearing in mind the various functions of the WCPs, namely, ecological conservation, sustainable development of aquaculture and eco-education and recreation.

(The presentation team left the meeting at this juncture.)

22. While Members generally welcomed the proposal to establish the WCPs System, Members considered that more details about the plan and its implementation should be provided to facilitate Members' understanding and deliberation of the matter. For example, Members were interested in the findings and preliminary

recommendations of the Feasibility Study on issues such as the current land ownership and status, the anticipated impact on stakeholders and their views, existing and planned modes of aquaculture, the proposals of different management models to be adopted, incentives to attract private landowners to take part in PPP as well as experiences of PPP projects in other places, etc.

23. The Chairman indicated that Members could provide more in-depth comments if the abovementioned information could be shared with Members for information.

(Post meeting note: The additional information on the subject matter was circulated to NCSC Members on 30 April 2024. Details are at Annex.)

Item 3 : Updates on the Monkey Contraceptive/Sterilisation Programme: Findings from the Population Viability Analysis (ACE-NC Paper 3/2023)

24. The Chairman indicated that the paper briefed Members on the latest progress of the monkey contraceptive/sterilisation programme conducted by AFCD and the latest findings arising from the Population Viability Analysis (PVA) commenced in 2022.

25. There was no declaration of interest by Members.

(The presentation team joined the meeting at this juncture.)

26. Mr Philip Yip briefed Members, by way of a PowerPoint presentation, on the background of the monkey contraceptive/sterilisation programme, findings of the PVA study and the enhanced management measures to be adopted.

Statistics

27. Members were supportive of AFCD's wild animal management work as a whole. In response to a Member's question, Mr Philip Yip indicated that the PVA study covered all monkey species recorded in the population survey and separate figures on Long-tailed Macaques were not available. The Chairman further enquired and Mr Yip shared that the number of reports of sightings of monkeys on the Hong Kong Island by members of the public was very limited.

28. To evaluate the effectiveness of the amendments to the Wild Animals Protection Ordinance (WAPO) (Cap. 170), a Member sought baseline statistics on prosecution for illegal feeding of wild animals. Mr Shek Chung-tong advised that it

might be hard to establish a baseline for comparison as there was fluctuation in the statistics, such as 121 enforcement cases in 2021, 66 in 2022 and 161 in 2023 (as at October 2023). He supplemented that, tentatively, there would be no grace period upon the implementation of the amendment to the WAPO which was targeted for August 2024. Mr Shek remarked that AFCDD would step up publicity and public education efforts to raise public awareness before the implementation.

Targeted Results

29. Addressing two Members' enquiry on the long-term goal of the programme, Mr Philip Yip advised that AFCDD targeted to continue with the sterilisation operations with a view to progressively reducing the monkey population to about 1600 to 1700 by 2028. Apart from controlling the monkey population, Mr Yip remarked that educating the public the right way to co-exist with wild animals especially monkeys by avoiding feeding, carrying plastic bags around them, staring at or approaching them, etc. would be essential for reducing their nuisances to people. The Chairman and one of the above Members reminded that the monkeys could adapt to human habits quickly and might react to not only plastic bags but also other types of bags such as backpacks or reusable bags.

Enforcement

30. In reply to a Member's question about the criteria to issue summons to offenders, Mr Shek Chung-tong advised that in typical cases, fixed penalty notices of \$5,000 would be issued to offenders of illegal feeding. He said that the offenders involved in serious nature and repeated violations of illegal feeding might be summoned to court and subject to heavier penalty. Mr Shek indicated that internal enforcement guidelines on the criteria for issuing summons would be provided to the front-line staff.

31. Two Members suggested that AFCDD should devise and promulgate clear guidelines regarding the enforcement criteria or threshold for issuing summon for public's information so as to avoid conflicts between the front-line staff and members of the public. One of the above Members added that a database should be made available for the front-line staff to verify previous offence records of a person and decide on the spot whether a summon or fixed penalty notice should be issued. The Chairman remarked that the same suggestion had already been raised by Members at the previous NCSC meeting and trusted that the Government would take them into consideration.

32. As feeding domestic animals such as stray cats and dogs was not an offence under the WAPO, a Member worried that some people might use this as a pretext to defend their behaviour of feeding wild animals. Mr Shek Chung-tong responded that front-line staff would carefully observe and collect evidence to support their decision to prosecute offenders by ways of issuance of fixed penalty notices or summons as appropriate.

Conclusion

33. The Chairman concluded that Members were supportive of AFCD's work and remarked that the key was to educate the public of the habits of the wild animals and the right way to co-exist with them in peace.

(The presentation team left the meeting at this juncture.)

Item 4 : Any Other Business

34. There was no other business for discussion at the meeting.

Item 5 : Date of next meeting

35. Members would be advised on the agenda in due course.

36. There being no other business, the meeting ended at 4:45 p.m.

**Nature Conservation Subcommittee Secretariat
May 2024**

**Nature Conservation Subcommittee under the
Advisory Council on the Environment**

The 38th Meeting

**Strategic Feasibility Study on the Development of
Wetland Conservation Parks System (*ACE-NC Paper 2/2023*)**

Supplementary Information

- **Engagement result from the key stakeholders (i.e. aquaculture operators) including the number of stakeholders consulted, the pros and cons of their existing aquaculture practices, planned model for aquaculture operations in the future, expected impact on them, their feedback and opinions etc.**

Aquaculture operators engaged during Part 1 public engagement exercise

- Hong Kong N.T. Fish Culture Association (香港新界養魚協進會)
- Sampo Shue Limited (三寶樹有限公司)
- HK Innovated Environmental Agriculture and Fisheries Association Limited (香港創新環保漁農業協會有限公司)
- Hong Kong Fisheries Alliance (香港漁業聯盟)
- The Aquaculture Technology Association of Guangdong and Hong Kong (粵港水產科技養殖協會)
- Office of Hon Steven HO Chun-yin (何俊賢議員辦事處)
- Aquaculture Technologies Asia Limited (亞洲水產養殖科技有限公司)
- MoVertical Farm (香港可移動垂直農場)
- Federation of Hong Kong Agricultural Associations (香港農業聯合會)
- Hong Kong Fishermen's Association (香港漁民互助社)
- Hong Kong Fishermen Consortium (香港漁民團體聯會)
- Smart Farming (愉富農科)
- Other individual fishermen

(Total: 34 attendees)

Feedback and opinions received during Part 1 public engagement exercise

- Concerned about the land resumption details and schedules.
- Pointed out the increase in the number of birds due to conservation management measures has greatly affected fisheries production, and there were no Government subsidies to compensate for the financial loss so caused to individual fishermen.
- Suggested delineating separate areas for birds' foraging (conservation) and aquaculture production.
- Suggested the aquaculture production areas in Wetland Conservation Parks (WCPs) should be managed by practitioners in aquaculture industry.

The pros and cons of existing aquaculture practices

- The traditional aquaculture practices often require minimal investment compared to more intensive aquaculture systems. The construction and maintenance of ponds for traditional aquaculture practices are generally less expensive, making it an accessible option for small-scale fish farmers. Besides, fish ponds provide a relatively natural environment for fish, allowing them to exhibit their natural behaviors and access natural food sources. Pond fish culture can also provide employment opportunities and contribute to the economic development of local communities particularly in rural areas. Furthermore, pond fish culture in the New Territories has a long history, the culture and techniques have their own values and are worth preserving.
- On the other hand, traditional pond systems often have limited production capacity due to factors such as space and environmental constraints. Fish culture is influenced by weather conditions such as typhoons and rainstorm disasters. Open pond systems are also vulnerable to diseases and predation from birds and other wildlife. Controlling diseases and preventing predation can be challenging, potentially leading to losses in fish production. It is also hard to control the growth rate and quality of fish. Natural variations in food availability, water temperature, and genetic diversity of fish populations can result in inconsistent growth and variable product quality. Poor management practices can lead to environmental issues such as eutrophication and water quality degradation, which may threaten other aquatic lives.

Planned model for aquaculture operations in the future

- The Government will introduce a suite of measures to enhance the fisheries resources, fisheries production and aquaculture potential etc. of the proposed Sam Po Shue Wetland Conservation Park (SPS WCP) with a view to compensating for the loss of fisheries resources arising from the development of the San Tin Technopole as well as to promoting sustainable development of the industry in the long run. These proposed measures, which form the basis of the planned model for aquaculture operations in the future, include introduction of ecologically enhanced fish ponds serving dual functions of wetland conservation and fisheries production. In particular, a fisheries enhancement area will be reserved for intensive aquaculture production where modernised aquaculture will be practised. In order to maintain a balance between aquaculture and ecological conservation, pond fish farming activities will be properly planned and managed. A fisheries research centre will also be established at San Tin Technopole to provide support to aquaculture researches and promote the use of modernised aquaculture in the proposed SPS WCP. Relevant details would be formulated in later detailed studies.

Expected benefits of planned model for aquaculture operations on the industry

- Compared to traditional pond fish farming practices, the introduction of modernised aquaculture techniques and management would enhance the quantity and quality of aquaculture production as well as the value of the aquaculture industry. Besides, modernised aquaculture practices have other added values to the industry and the environment such as time and energy saving, reduction in aquaculture sewage and carbon emissions, better environmental control, and minimisation of outbreak of disease etc.
- The implementation of modernised aquaculture would also improve the environmental sustainability, as well as achieving the objectives of ecological conservation and aquaculture operation in balance.

- **Proportion of current land ownership and status of the land (i.e. privately owned, vacant public land, public land occupied by tenants etc. and their respective locations)**

Based on the scope of and data gathered by the consultant under the Strategic Feasibility Study, the following information about the percentage of Government land and private land within the Study Areas of the Proposed Parks is estimated as follows -

Proposed Park	<u>Government Land</u>	<u>Private Land</u>
Sam Po Shue WCP	46%	54%
Hoo Hok Wai WCP	37%	63%
Nam Sang Wai WCP	58%	42%
Hong Kong Wetland Park Expansion Area	49%	51%
Sha Ling/Nam Hang Nature Park	87%	13%

- **Preliminary proposal on the management options to be adopted (e.g. percentage and scale of the land to be directly managed by Government Departments/ Public-Private Partnership (PPP) / Collaboration with NGOs)**
- **Proportion of planned land use of the proposed parks (e.g. aquaculture, recreation, eco-tourism, commercial use etc.)**
- **Details of the mosaic habitat to be created in the proposed parks including the expected ratio, pattern and locations of different micro habitats such as mangroves and fish ponds**

The Strategic Feasibility Study on the Development of Wetland Conservation Parks System (the Feasibility Study) aims to review the existing conditions of the proposed areas of the WCPs System with respect to ecological values, land use/planning, aquaculture activities, and eco-education/recreation facilities, etc., and formulate recommendations on the development of the WCPs System, including locations/boundaries, functions, positioning and management models, etc., of the proposed Parks. The preliminary recommendations of the Feasibility Study would form the basis for taking forward further detailed studies of individual Parks for formulating specific proposals on the implementation of each Park. The requested information for SPS WCP will be available only after further conducting the Investigation Study, which is expected to be carried out from 2024 to 2026. Since the scale of the WCPs System is unprecedentedly large, and the Government is recommended to take a pragmatic approach and develop the WCPs System in phases. The requested information for the other Parks will be available when the Government takes forward their development in due course.

- **Expected benefits such as ecological enhancement and increase in local food produce with the illustration of figures and statistics**

Upon the establishment of the WCPs System, the Government can implement proactive conservation and fisheries enhancement measures, restore degraded or abandoned wetland/fishpond habitats, and run the Parks with scientific management and advanced operation, so as to increase the overall ecological value and raise aquaculture productivity of the wetlands and fishponds, as well as increase the environmental capacity of the Northern Metropolis. The relevant figures and statistics are not available at this stage, but metrics to evaluate the change in environmental capacity with the development of the WCPs System are being formulated under the Feasibility Study, and appropriate criteria to assess the benefits such as ecological enhancement and increase in local food produce will be included as well.

- **Strategy/ Incentives to attract private landowners to take part in public-private partnership (PPP) and experiences of PPP projects of other places**

Some overseas examples of strategies/incentives to attract private landowners to take part in PPP are set out below.

Conservation Easement

Conservation easement is an established conservation tool in North America. It refers to a voluntary legal agreement between a landowner and a government agency or qualified conservation organisation (typically a land trust¹) that restricts the type and intensity of development that may take place on a property/land in the future. The conservation easements can be tailored to reflect the conservation goals of the landowner and of the government or land trust agency, with the flexibility that the landowner retains ownership and rights to develop certain parts of the land and/or continue generating revenue from the land as long as this does not conflict with conservation goals. As an incentive, the landowner can qualify for tax benefits for conservation easements, which may include income tax deduction, estate tax reductions and exclusions upon the death of the landowners.

A database of conservation easements in the US can be found at:

<https://www.conservationeasement.us/>

¹ A non-government organisation established specifically to acquire land or conservation easements, and/or stewarding/managing land or conservation easements.

Mitigation Banking

In the US, a mitigation bank is permanently protected land that is conserved and managed for its natural resource values. The restoration / conservation work completed at a mitigation bank generates a net gain of ecological function, creating a credit. The amount of credits awarded to the bank is based on a functionality assessment. In exchange for permanently protecting, managing and monitoring the land, the mitigation bank owner can sell those credits to a developer that needs to meet compensatory requirements for the environmental impacts of their development projects. Use of mitigation bank credits must occur in advance of project impacts when the compensation cannot be achieved at the project site or would not be as environmentally beneficial. The value of the credits is based on the forces of the private market.

More information on mitigation/conservation banking can be found at the US Environmental Protection Agency and California Department of Fish and Wildlife websites:

<https://www.epa.gov/cwa-404/mitigation-banks-under-cwa-section-404>

<https://wildlife.ca.gov/Conservation/Planning/Banking>
