

COUNTRY AND MARINE PARKS BOARD

Enhancement of Toilet Facilities in Country Parks

1. Purpose

1.1 This paper aims to brief members on the progress of the enhancement of toilet facilities in country parks.

2. Background

2.1 With around 12 million visitors per annum visiting country parks in the past few years, the Agriculture, Fisheries and Conservation Department (AFCD) plays a vital role in ensuring visitor enjoyment in country parks through provision of various recreational and supporting facilities. The provision of clean and tidy toilet facilities in country parks is considered an essential basic service to create a good impression of quality services and enjoyable nature experience for country park visitors.

2.2 Our strategy is to provide toilets at major recreation areas as well as the starting / end points of popular hiking trails. Currently, the AFCD is providing mainly three types of public toilets, namely flushing toilets, dry toilets and portable toilets at various locations in country parks. There are about 220 public toilets in the country parks. The AFCD is responsible for routine management of these public toilets, including cleansing, desludging and general maintenance through deployment of in-house staff or contractors.

2.3 Most of the country park areas are remote and generally lack of supporting infrastructures including electricity, water supply, sewerage network and proper vehicular access. Therefore, the provisions of toilet facilities and services in country parks at specific locations are challenged by these constraints. Meanwhile, it is also necessary to carefully select suitable locations for provision of toilet facilities based on the need of visitors and consider the proper treatment of sewage and sludge to avoid water pollution within the water gathering grounds.

2.4 Against the above background, the AFCD commissioned a consultancy study on “Review of Toilet Facilities in Various Country Parks in Hong Kong, Package 1”

(the Study) in 2018 with an aim to study and investigate the options for enhancing the hygiene, convenience, safety and comfort of the country park toilets. The Study preliminarily recommended the enhancement of toilet facilities at ten locations of country parks with different environmental conditions and challenges, and also the application of sawdust composting toilet at remote locations where reliable water supply is unavailable. The findings of the Study were reported at the meeting of the Country Parks Committee held on 12 November 2019.

2.5 The Chief Executive announced in the Policy Address in 2019 that the Government would explore enhancements to the visitor facilities in country parks and special areas. In the 2021-22 Budget, the Government earmarked \$500 million for the AFCD, with the assistance of other works departments, to take forward the enhancements to the visitor facilities in country parks and special areas.

3. Enhancement of the Recommended Toilet Sites

3.1 The AFCD has proceeded with the enhancement works on the toilet facilities in country parks according to the recommendations of the Study. To determine the suitability of the ten preliminarily recommended sites, the AFCD has worked closely with the Architectural Services Department (ArchSD) and other works department to evaluate the proposals in detail, considering different factors including the pattern of visitor usage, water supply, sewage treatment, power supply, as well as other site constraints. Subject to the confirmation of preliminary technical feasibility, the project will proceed to investigation and detailed design, followed by construction.

3.2 The enhancement projects will be implemented in phases using the resources earmarked under the 2021-22 Budget. Pre-construction investigation for the following projects have commenced: reconstruction of existing toilets at Bride's Pool Road and Tai Tam Tuk, and construction of a new public toilet at Pak Kung Au on Lantau Island. It is expected that the construction works for these three toilets will be completed in 2024 to 2025. The AFCD is conducting assessment of technical feasibility and other preparatory work for the remaining sites in conjunction with the ArchSD. Details of the ten proposed toilet enhancement projects are provided in the **Appendix**.

3.3 The new toilets will adopt the principles of low-carbon and green design that integrate with the natural surroundings, such as sewage treatment by membrane bioreactor, reuse of treated water for flushing, installation of photovoltaic panels, maximising the use of natural lighting and ventilation. The toilets will also

accommodate the needs of people of different ages and physical abilities as far as the site fits, e.g. provision of baby care facilities, accessible toilets and barrier-free access, water filling station, etc. The reconstruction of toilets at Tai Tam Tuk and Bride's Pool Road will increase the capacity, stabilise water supply and provide accessible toilets with a view to enhancing the visitor services. In Pak Kung Au, the new toilet with resting facilities will replace the existing portable toilets to cope with the increasing demand for toilet services at this hiking hub.

4. Sawdust Composting Toilet under Trial in Country Parks

4.1 The Study also recommended the sawdust composting toilet as an enhancement option to be adopted for remote sites without water and electricity supplies. As there is no precedent local application of sawdust composting toilet in Hong Kong before, the AFCD has launched a trial scheme on its application in Tai Lam Country Park since September 2021 with a view to examining its practicality and effectiveness, and investigating the cost and resource implication for its operation in the country park setting.

4.2 During the trial, we have collected users' feedback on experience and data on environmental odour, as well as monitored the operation and maintenance of the sawdust composting toilet. Some 4,500 visitors have used the toilet as of April 2022. So far, members of the public have generally welcomed the sawdust toilet as an alternative to conventional dry toilets or portable toilets. Nevertheless, a significant proportion of the users have requested the provision of water for handwashing. Subject to the findings of the trial scheme, the AFCD will review the practicality and effectiveness of the sawdust composting toilet and determine the feasibility of its application in other remote locations in country parks.

5. Publicity on Country Parks Toilet Facilities and Services

5.1 Visitors to country parks have frequently requested for improvement on services and facilities of public toilets in country parks, particularly on the overall cleanliness and coverage. Due to the remoteness of country parks and various constraints, it is generally difficult to provide public toilet services comparable to those of the urban areas. While the AFCD will continue to enhance the facilities and services provided to meet rising public expectations, we will also inform the public about the constraints in providing toilet services in country parks. Therefore, we have posted suitable signs or notices in country park toilets to remind users to save water and maintain cleanliness. Through our publicity campaign, we will raise public awareness

on hiking etiquettes such as cherishing natural resources and handling wastes properly. To indicate the location of toilets for public convenience, we have erected directional signs on site and indicated toilet locations on maps in country parks. The general public may also access the AFCD's website or the Geo-info platform for the locations of toilets in country parks. It is considered that such online information can further facilitate country park users to better plan ahead for their trips to country parks.

6. Advice Sought

6.1 Members are invited to comment on the enhancement of toilet facilities in country parks.

Country and Marine Parks Authority
Agriculture, Fisheries and Conservation Department
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List of Proposed Toilet Enhancement Projects

Site	Country Park / Special Area	Progress	Features
1. Bride's Pool Road	Pat Sin Leng	Pre-construction investigation	Reconstruction of existing toilet to improve capacity, water supply, sewage treatment and hygiene
2. Tai Tam Tuk	Tai Tam	Pre-construction investigation	Reconstruction of existing toilet to improve capacity, accessibility, sewage treatment and hygiene
3. Pak Kung Au	Lantau South	Pre-construction investigation	New toilet with resting facilities
4. Aberdeen P.H.A.B. Site	Aberdeen	Formulation of project scope and co-organising design competition with ArchSD	Reconstruction of the existing toilet and refreshment kiosk, to improve capacity, accessibility, sewage treatment and hygiene
5. Long Ke Wan Campsite	Sai Kung East	Formulation of project scope	New toilet with electricity, sewage treatment and water supply to improve capacity and hygiene
6. Twisk Campsite	Tai Lam	Formulation of project scope	New toilet with electricity and water supply, sewage treatment and barrier free facilities
7. Tung Lung Chau	Tung Lung Fort Special Area	Assessment of technical feasibility	To be determined, subject to the findings of technical feasibility

Site	Country Park / Special Area	Progress	Features
Campsite			assessment
8. Shing Mun Picnic Site	Shing Mun	Assessment of technical feasibility	To be determined, subject to the findings of technical feasibility assessment
9. Lau Shui Heung	Pat Sin Leng	Assessment of technical feasibility	To be determined, subject to the findings of technical feasibility assessment
10. Quarry Bay Morning Walker Garden	Tai Tam (Quarry Bay Extension)	Assessment of technical feasibility	To be determined, subject to the findings of technical feasibility assessment