For information on 30 November 2012

Legislative Council Joint Meeting of Panel on Environmental Affairs and Panel on Home Affairs

Provision of a Public Beach at Lung Mei, Tai Po

Purpose

This paper explains the background to the decision to build a public bathing beach at Lung Mei, Tai Po, and sets out the Administration's responses to recent concerns raised about the project.

BACKGROUND

2. In 2000, the Tai Po District Council (TPDC) formally proposed to the Administration that it should develop a public bathing beach at Lung Mei. In January 2005, the project was included in a list of 25 leisure and cultural services (LCS) projects recommended for priority implementation in the then Chief Executive's Policy Address. When consulted on the priority for implementation of LCS projects in the district, the TPDC has consistently accorded top priority to the Lung Mei project and requested its early implementation. Between 2000 and 2012, the project was formally discussed 15 times at meetings of the TPDC and its committees, and mentioned over 70 times.

3. Since 2005, the Leisure and Cultural Services Department (LCSD) have been taking forward the implementation of the 25 priority LCS projects. As far as the Lung Mei project is concerned, the Administration has observed all the relevant statutory procedures, consulted, respectively, the Advisory Council on the Environment (ACE) (on the findings of the relevant Environmental Impact Assessment (EIA) report), the Town Planning Board (on the views received after the gazettal of the "Draft Ting Kok Outline Zoning Plan S/NE-TK/14") and the Chief Executive-in-Council (for the approval of the "Draft Ting Kok Outline Zoning Plan No. S/NE-TK/14" under the Town Planning Ordinance, the resumption of private land under the Lands Resumption Ordinance and the reclamation works under the Foreshore and Sea-bed (Reclamations) Ordinance). Whilst following these procedures we have received 23 objections, all of which have either been resolved or been duly reflected in the documents submitted to the authorities concerned for consideration and decision. 4. We consulted the Legislative Council (LegCo) Panel on Home Affairs on the project in April 2012, received the support of the Public Works Subcommittee for the project in May 2012, and finally obtained funding approval from the LegCo Finance Committee in July 2012. We invited tenders for the construction of the project in late August 2012 and the tender period closed on 12 October 2012. Pre-construction work, including translocation of marine animals is scheduled to start at the end of 2012. Following completion of the project at the end of 2014, the beach is expected to open to the public in April 2015.

CONCERNS AND RESPONSE

5. Shortly before the close of the tender period, a number of concern groups including environmental organizations (the Groups) approached the Administration with a proposal to replace the bathing beach at Lung Mei with an "eco-pool". Relevant government departments met the Groups on 8 October 2012 to listen to the "eco-pool" proposal and to respond to their concerns. Since then, the Groups have continued to question the need for and the suitability of developing a bathing beach at Lung Mei as well as the credibility of the EIA report endorsed by the ACE in 2008. Their main arguments are that –

- (a) the poor water quality at Lung Mei would make the beach unsuitable for swimming;
- (b) Lung Mei has very high ecological value and translocation of the marine species would damage the ecological environment;
- (c) the water depth at Lung Mei during low tide is not sufficient for swimming; and
- (d) the beach would suffer from sand loss, as in the case of Golden Beach, Tuen Mun.

The Groups have therefore requested the Administration to cancel the bathing beach project and, instead, consider building an "eco pool" in order to conserve the ecology whilst catering for the wishes of local residents for a new swimming venue. They have also asked why the Administration has not considered developing the natural beach at Wu Kai Sha, Sha Tin, into a public bathing beach or building a floating platform or bathing pavilion at Lung Mei or elsewhere in the district. 6. Having examined the Groups' concerns and the latest data and reports provided by relevant departments, the Administration announced on 25 October 2012 its plan to implement the Ting Kok Coastal Conservation Plan (or "Ting Kok Plus") that would at the same time enhance conservation of the 3-km long Ting Kok coastline and create a public beach at Lung Mei to meet the needs of residents of the New Territories East (NTE) region. At the TPDC meeting on 1 November 2012, the council passed a motion supporting the implementation of the Ting Kok Coastal Conservation Plan and requesting the early implementation of the public beach project at Lung Mei.

7. The Administration's response to the concerns raised in recent months is set out below.

(a) Demand for beach facilities

8. There is strong public demand for beach facilities in Hong Kong. In 2011, the 41 gazetted beaches managed by the LCSD had a total attendance of over 11 million, which was higher than the attendance of 9.5 million at the department's 41 public swimming pools in the same year. The attendance at public beaches has increased annually by 7% to 8% in the past two years. People go to beaches not just to swim but also to sunbathe and enjoy the coastal scenery-activities that generally cannot be done at swimming pools.

9. The 41 gazetted beaches are located in five districts, namely Southern, Islands, Tuen Mun, Tsuen Wan and Sai Kung. Tai Po and the neighbouring NTE districts of Sha Tin and North have a combined population of over 1.25 million, as well as scenic coastlines, however there is not a single public beach in these districts. Since 2000, the TPDC has strongly and repeatedly requested the early construction of a public beach at Lung Mei for the enjoyment of local residents and visitors. The project has received cross-party support in the TPDC, and has also been supported by the Sha Tin and North DCs. They consider that the 200-metre long Lung Mei Beach, which would take up less than one-tenth of the 3-km coastline of Ting Kok Road, would complement the facilities at nearby Tai Mei Tuk, which is a popular location for water sports and cycling.

10. Whilst the Administration does not have a specific policy to provide a public bathing beach in each of the 18 districts, the long-standing request of the TPDC for a public bathing beach at Lung Mei to serve the NTE region is considered reasonable and technically feasible.

(b) Alternatives proposed by the concern groups

(i) Replacing the bathing beach with an ''eco pool"

11. Based on the limited information available, we believe that the proposal is premised on the basis that the existing coastline should be maintained and no reclamation should be carried out at Lung Mei. In the circumstances, only about 0.5 hectare of land would be available for the development of an "eco pool". This is inadequate for the development of a sizeable semi-open pool with the necessary supporting facilities such as pumping/plant room, changing rooms, car parking, life-saving and first-aid facilities. When this alternative was raised at the TPDC meeting on 1 November 2012, the DC reaffirmed its request for a public beach at Lung Mei rather than an "eco pool".

(ii) Developing a simple structure such as a floating platform or bathing pavillion at Lung Mei or Tai Po Waterfront Park (TPWP)

12. On the understanding that the concern groups do not wish to see any structures erected or any clearance of the seabed at Lung Mei, there is no land for the provision of the necessary life-saving and supporting facilities to accommodate safe public swimming there. The same concerns apply to the proposal to develop a bathing pavilion at the TPWP. The marine traffic near the TPWP would also pose a danger to swimmers.

(iii) Development of a public beach at Wu Kai Sha, Sha Tin, rather than Lung Mei

13. The idea of developing the sandy coastlines at Wu Kai Sha into a public beach was first endorsed by the Culture, Sports and Community Committee under Sha Tin District Council (STDC) in late 2009. Given the many LCS projects on its priority list, the STDC has not yet accorded any priority to developing a public beach at Wu Kai Sha or To Tau. The alternative of developing a public beach at Wu Kai Sha in lieu of Lung Mei put forward by the Groups recently could not have been considered in the context of the 2005 Policy Address nor the EIA report endorsed by the ACE in 2008.

14. The Wu Kai Sha coast is surrounded by a narrow strip of sand without any supporting facilities such as emergency vehicular access, changing, life-saving and car parking facilities. In the area between the Wu Kai Sha public pier and the archery range in the Wu Kai Sha Youth Village, no vacant government land is available for developing supporting facilities. As the natural beach has no supporting facilities, LCSD is not in a position to manage it as a gazetted beach. The area around To Tau near Whitehead, currently zoned as "Conservation Area", comprises, among other things, a mature coastal woodland and a prehistoric archaeological site. The ecological and archaeological values of the site will have to be carefully examined before any development can be confirmed. If we are to consider developing a public beach at either of these locations, we need to assess a host of factors such as the location of the proposed site, the water quality in the vicinity, the feasibility of developing ancillary facilities, the potential impact on nearby residents and the land and marine environments as well as the prehistoric archaeological site, and the views of local community.

(b) Environmental concerns

(i) Ecological management

15. In January 2008, the Civil Engineering and Development Department (CEDD) consulted the ACE on the findings of the EIA report for the project. The ACE endorsed the report on the condition that additional information should be provided with regard to the ecological status of the habitat at Lung Mei. After conducting additional ecological surveys, CEDD consulted the ACE again in November 2008. The ACE subsequently endorsed the EIA report together with additional information on ecological surveys subject to certain conditions, among which the project size has to be reduced to further minimize the potential ecological impact.

16. Accordingly, CEDD prepared a revised project plan with a reduced sand filling area, car parking area and project footprint; and undertook to implement ecological mitigation measures during construction with a view to minimising the impact on the marine ecology. Subsequently, the Director of Environmental Protection issued an Environmental Permit (EP) for the project in April 2010.

17. According to the requirements of the EP, the contractor shall remove rocks and hard objects in the intertidal zone before starting the works and the area shall not exceed $10m^2$ for each removal. The "cleared" areas shall be properly fenced off immediately after removal of the rocks and hard objects. The rock removal works shall be conducted under the supervision of a qualified fish specialist who shall inspect the "cleared" areas to avoid trapping any of the three species of conservation importance. The relevant work shall only be carried out at low tides.

18. CEDD has adopted a practice of "Conservation before Construction" in developing the public beach at Lung Mei. Consultants were engaged in early

2012 to carry out further marine ecological investigation and design, including conducting ecological surveys, identifying suitable reception sites, drafting contract specifications, conducting site trials and training site supervisory staff.

19. The consultants carried out detailed ecological surveys in both dry and wet seasons this year. Ting Kok East was confirmed as a suitable reception site, mainly because Lung Mei and Ting Kok East are both within Tolo Harbour and have very similar marine ecological characteristics. As Ting Kok East is several times larger than Lung Mei, it is considered capable of accommodating the marine species to be relocated from Lung Mei. CEDD has drawn up guidelines and standards for the translocation work, which include full-time supervision by a qualified fish specialist. Before the translocation, different species will be assigned to designated areas within the reception site. This will help the species adapt to the new environment and enable subsequent ecological monitoring. Apart from the three fish species of conservation importance, echinoderms found in the intertidal zone, i.e. star fish, sea urchins and sea cucumbers, will also be relocated to the reception site.

20. CEDD conducted translocation trials for three days in July 2012 and environmental groups were invited to give their views at the preparation stage. During the trial, it was observed that majority of the mobile species moved quickly away from the location where rock removal or fencing work was taking place. The three fish species of conservation importance (including the two-spot goby (*Psammogobius biocellatus*), tropical sand goby (*Favonigobius reichei*) and grass puffer (*Takifugu niphobles*) were not found during the trials. A total of about 20 other species of fish and echinoderms were successfully moved to Ting Kok East. From the experience of the trials, it is envisaged that only limited numbers of species will need to be captured and relocated to Ting Kok East.

21. The translocation of animal species is not the first of its kind in Hong Kong. Corals and fish from Pak A, Sai Kung and Tung Chung were successfully translocated to other sites to facilitate construction work. CEDD will enhance training for frontline site supervisory staff to work with the fish specialist, experts from the Agriculture, Fisheries and Conservation Department (AFCD), the Environmental Team and the Independent Environmental Checker to supervise the translocation work. During the construction stage, CEDD will continue to communicate with environmental groups and invite them to participate in the translocation of marine species from Lung Mei to Ting Kok East.

(ii) Water quality

22. To improve the water quality at Lung Mei, the Administration is

providing a new sewerage network in Lung Mei and its vicinity. Construction is underway and the works will largely be completed in 2013. The EIA of the Lung Mei beach project adopted a conservative estimate that the water quality near the beach will reach the standard suitable for swimming if about 60% of the dwellings in four villages (Lo Tsz Tin, Lung Mei, Wong Chuk Tsuen and Tai Mei Tuk) are connected to the new public sewers. Experience shows that a sewer connection rate of up to 90% to 95% has been achieved in other village sewerage projects in Tai Po district. The Administration has sought the co-operation of the related Rural Committees to encourage as many people as possible to connect their dwellings to the public sewerage network. The latest estimates suggest that at least 80% of the dwellings would be connected to the network before completion of the Lung Mei beach in late 2014. The Administration will continue to enlist the support of villagers with a view to raising the connection rate to over 90%.

23. The Environmental Protection Department (EPD) has been monitoring the water quality at Lung Mei. As an increasing number of dwellings have been connected to public sewers, the water quality of Lung Mei has shown marked improvement, from Grade 4 (Poor) in mid-2012 to Grade 2 (Fair) in recent weeks. The water quality at Lung Mei will further improve when more dwellings are connected to the public sewerage network. We are therefore confident that upon the opening of Lung Mei Beach to the public in 2015, the water quality will be up to the required standard. The EPD will continue to conduct water quality monitoring and publish the monitoring results regularly.

24. The levels of heavy metals and tributyltin (TBT) in sea water are generally very low and would not affect beach users. Overseas standards do not include heavy metals and TBT in their beach water quality monitoring. Nevertheless, the EIA report of the Lung Mei project did assess whether or not the construction of a beach would lead to an increase in the levels of heavy metals and other contaminants (including TBT) by collecting samples from nine different locations in the beach area and carrying out elutriate tests. The results indicated that dredged sediment at the proposed project site should not cause unacceptable levels of contaminant release to the surrounding water. The data from EPD's marine monitoring stations near Lung Mei at Plover Cove indicate that the heavy metal and TBT levels in the area are very low. Some are even below their respective detection limits.

25. Five red tide cases were recorded in areas near Tai Mei Tuk, including Lung Mei, between 1975 and 2006. The algal species that caused the red tides were not toxic to fish. Since 2007, 94 red tides have been recorded in Hong

Kong, of which 21 cases (22%) were recorded in Tolo Harbour and the Tolo Channel. None of these 21 cases affected Lung Mei.

(iii) Spotted seahorses

26. Environmental groups have expressed concern at the possible impact of the construction works on spotted seashores that have been found at Lung Mei. According to the annual Reef Check, organised by the AFCD and Reef Check Foundation Hong Kong, a total of 103 spotted seahorses were recorded in Hong Kong waters from 2001 to 2012 in various sites including Yan Chau Tong, Hoi Ha Wan, Kat O, Sharp Island, Ninepin, Tung Ping Chau, Port Island and Bluff Island. According to AFCD's records, in 2012, spotted seahorses have mainly been found in the north eastern waters of Hong Kong, in locations such as Hoi Ha Wan, Tai Mei Tuk of Tolo Harbour, Tap Mun, Port Island, Kat O, Kau Sai and Sharp Island. No seahorses were recorded in the ecological surveys at Lung Mei under the consultancy study commissioned by the CEDD. As the habitats of spotted seahorses are generally confined to bays with seaweed and coral, we believe the waters of Lung Mei are not a major spawning and nursery ground for the creature.

(iv) Water depth

27. The CEDD has taken account of the ebb and flood of tides at different times when designing the Lung Mei beach. The length of the deep water area (over 1.3 m) will mostly fall in the range of 50 m to 125 m between the low and high tides. Throughout the swimming season, a sufficient deep water area will be available for swimming. The depth of water and the area available for swimming at ebb tide at the Lung Mei beach will be comparable to those at beaches such as the Castle Peak Bay Beach. The **Enclosure** has more information on the deep water area of Lung Mei beach.

(v) Sand loss

28. Factors such as currents, tidal flow, waves and geographic location can cause sand loss at both natural and artificial beaches. The loss of sand at beaches exposing to open sea waves may be more evident after typhoons. Golden Beach, as quoted by the Groups susceptible to sand loss, was developed by the private sector and handed over to LCSD for management in the 1990s. Owing to local geographical factors and the absence of groynes at the ends of the beach to prevent sand loss, Golden Beach is susceptible to sand loss caused by waves and currents and after severe storms. In contrast, Lung Mei enjoys the protection offered by topographical features and is less prone to extreme wave attack.

Moreover, with the construction of two groynes at the ends of the beach, significant sand loss is not expected.

TING KOK COASTAL CONSERVATION PLAN

29. The Administration recognises the ecological and scenic value of the Ting Kok and Shuen Wan Hoi area, as well as Tolo Harbour and the Tolo Channel. In response to the public concerns on ecological conservation, we will strengthen the conservation of the Ting Kok Site of Special Scientific Interests (SSSI) and Ting Kok East. On 25 October 2012, we announced the Ting Kok Coastal Conservation Plan ("Ting Kok Plus") to protect the ecology of this area in the long term. The Environment Bureau (ENB) will lead an inter-bureaux and departmental team to work out the implementation details, as well as engaging interested parties and expert groups. ENB will organise a meeting with interested parties on the conservation plan for the SSSI and Ting Kok area in December 2012.

Advice sought

30. Members are invited to note the content of this paper.

Home Affairs Bureau Environment Bureau Agriculture, Fisheries and Conservation Department Civil Engineering and Development Department Environmental Protection Department Leisure and Cultural Services Department Home Affairs Department

November 2012

<u>Enclosure</u> 附件

Deep water zone of the beach (>1.3m) 泳灘深水區(>1.3米)

