# LCQ14: Water supply arrangements and management of water resources

Following is a question by the Hon Wu Chi-wai and a written reply by the Secretary for Development, Mr Michael Wong, in the Legislative Council today (June 20):

#### Question:

Regarding the water supply arrangements and management of water resources in Hong Kong, will the Government inform this Council:

- (1) of the time limit, prescribed under the Agreement for the supply of Dongjiang water to Hong Kong signed between the Hong Kong Government and the Guangdong Provincial Government, within which the Guangdong provincial authorities must notify the Hong Kong Government upon the occurrence of incidents (such as insufficient water quantity, pollution of water sources or damages to water supply facilities) on the Mainland which may lead to an interruption to the supply of Dongjiang water to Hong Kong;
- (2) whether the Water Supplies Department (WSD) has formulated a contingency plan to cope with the situation of a tight supply of fresh water in Hong Kong; if so, of the details (including the circumstances under which the plan will be activated);
- (3) whether various government departments have formulated plans and administrative arrangements for implementing water conservation measures (such as reducing the use of fresh water for street cleaning by the Food and Environmental Hygiene Department (FEHD)) when fresh water supply is tight; if so, of the details;
- (4) of the respective annual water consumption of the top five government departments in water consumption (including the water consumption of their outsourced service contractors) in the past three years, with a breakdown by use of the water;
- (5) whether various government departments have formulated (i) short-term and long-term water conservation targets as well as (ii) guidelines on water consumption; if so, of the details; as the Government said in reply to a question raised by a Member of this Council in 2013 that the WSD was reviewing the water consumption practices in the Leisure and Cultural Services Department's parks and swimming pools as well as the FEHD's markets, street cleaning and refuse collection points, and would gradually extend the scope of the review to other government departments that have relatively high water consumption, of the latest progress of such work;
- (6) whether it reviewed the water tariff structure in the past three years with a view to encouraging water conservation; if so, of the details and

follow-up work;

- (7) as the Government has taken forward the Inter-Reservoirs Transfer Scheme since as early as 2004, of the reasons why the Scheme still remains at the stage of reviewing and refining the detailed design, method statements and related environmental impact assessments at present; why it has not yet submitted funding applications to the Finance Committee of this Council in respect of the major works under the Scheme; and
- (8) apart from the Tseung Kwan O Desalination Plant which is under construction, whether the Government has studied the implementation of other seawater desalination projects; if so, of the details; if not, the reasons for that?

Reply:

President,

The Government is committed to ensuring the reliability of water supply in Hong Kong. Currently, fresh water supply for Hong Kong comprises imported Dongjiang (DJ) water from Guangdong and rainwater from local catchments, meeting 70 to 80 per cent and 20 to 30 per cent of our total fresh water consumption respectively. The "package deal lump sum" approach has been adopted for DJ water supply agreements since 2006. This approach enables us to import DJ water as needed according to the amount of local yield collected each year up to an annual supply ceiling. The annual supply ceiling in the current supply agreement is set at 820 million cubic metres based on fresh water demand analysis conducted by the WSD to ensure water supply reliability of 99 per cent, such that water supply can be maintained round-the-clock even under extreme drought condition with a return period of one in 100 years.

The WSD has promulgated the Total Water Management Strategy in 2008 to ensure sustainable and reliable water supply in Hong Kong. The Strategy puts an emphasis on containing the growth of water demand through water conservation, and supplementing the three existing water sources, being local yield, DJ water and seawater for flushing by three new water sources, namely desalinated seawater, reclaimed water and recycled grey water/harvested rainwater.

My response to the eight parts of Hon Wu's question is as follows:

(1) The Guangdong authorities and the WSD of Hong Kong have established a notification mechanism for serious incidents regarding the supply of DJ water to Hong Kong. In case of serious incidents, the designated contact person of Guangdong authorities would immediately notify the designated contact person of the WSD by phone. Furthermore, the Guangdong authorities would hold regular meetings with the Development Bureau and WSD in Hong Kong to discuss issues regarding the supply of DJ water to Hong Kong (including the quantity and quality of DJ water). These meetings include the Hong Kong/Guangdong Water Supply Operation and Management Technical Cooperation Sub-Group Meeting, the Hong Kong/Guangdong Water Supply Business Meeting and the

Special Panel on the Protection of DJ Water Quality under the Expert Group of the Hong Kong/Guangdong Joint Working Group on Sustainable Development and Environmental Protection.

- (2) & (3) As mentioned above, water supply can be maintained round-the-clock even under extreme drought condition with a return period of one in 100 years under the current water supply arrangement in Hong Kong. If Hong Kong suffers from persistent extremely dry weather, we will take into account a host of factors including fresh water demand, supply situation of various water resources, rainfall forecast for implementing appropriate responsive actions, such as imposing restriction on non-essential supplies including landscape irrigation, filling of swimming pools and street cleansing.
- (4) & (5) The five government departments with the highest water consumption in the past three years are tabulated below:

		Water consumption (million cubic metres)*		
Government department		2015	2016	2017
1	Leisure and Cultural Services Department	13.05	12.51	12.38
2	Correctional Services Department	4.49	4.30	4.34
3	Food and Environmental Hygiene Department	3.42	3.63	3.52
4	Hong Kong Police Force	2.88	2.47	2.47
5	Drainage Services Department	1.92	2.12	2.22
Total Water Consumption		25.76	25.03	24.93

<sup>\*</sup> The figures include water consumed by service providers at the premises of the respective government departments.

The WSD has prepared best practice guidelines for the top three government departments in water consumption, namely the Leisure and Cultural Services Department, the Correctional Services Department and the Food and Environmental Hygiene Department. All of them are progressively taking forward the water conservation measures recommended in the guidelines. In addition, the WSD has been carrying out the installation of water saving devices (such as water taps and showers) in suitable government venues and schools in phases since 2009. Currently, more than 50 000 devices have been installed. We target to complete the installation work by 2022. Besides, the installation of flow controllers in government venues and schools was substantially completed with about 53 000 pieces installed.

(6) Domestic consumers are usually billed for their water charges at quadmonthly intervals. Currently, the water charges payable are calculated using a tariff structure which consists of four tiers:

first tier: free of charge for the first 12 cubic metres;

second tier: \$4.16 per cubic metre for the next 31 cubic metres; third tier: \$6.45 per cubic metre for the next 19 cubic metres

fourth tier: \$9.05 per cubic metre for any consumption above the level of 62

cubic metres

The above tier tariff structure encourages the public to conserve water. The Government reviews the tariff rates and the tariff structure on a regular basis.

- (7) The Government takes forward the Inter-Reservoirs Transfer Scheme, under which a tunnel connecting the Kowloon Byewash Reservoir and the Lower Shing Mun Reservoir will be built to reduce flood risks in the West Kowloon region and reduce overflow from the Kowloon Group of Reservoirs, thereby increasing water resources at the same time. We have obtained support on the project from the Legislative Council Public Works Subcommittee on May 28. We are now seeking funding approval from the Finance Committee. If the funding is approved, the Drainage Services Department plans to commence the construction works in the first quarter of 2019 for completion in the fourth quarter of 2022.
- (8) Tenders are being invited for the "Design, Build and Operate" contract of the first stage of the Tseung Kwan O (TKO) desalination plant for commissioning in 2022. The first stage of the desalination plant will have a water production capacity of 135 000 cubic metres per day to meet about five per cent of the fresh water demand in Hong Kong. There is also provision for future expansion to the ultimate water production capacity of up to 270 000 cubic metres per day if necessary. The Government will study the programme for implementing the second stage of TKO desalination plant having regard to the supply situation of various water resources, the fresh water demand forecast, the desalination technology development, etc.

## **Effective Exchange Rate Index**

The effective exchange rate index for the Hong Kong dollar on Wednesday, June 20, 2018 is 100.8 (up 0.1 against yesterday's index).

## Missing man in Kwai Chung located

A man who went missing in Kwai Chung was located.

Wong Man-chuk, aged 49, went missing after he left an elderly home

on Shek Yam Road on May 23 afternoon. Staff of the elderly home made a report to Police on the same day.

The man was located in Tsuen Wan MTR Station on May 26 morning. He sustained no injuries and no suspicious circumstances were detected.

# LCQ12: Handling of emergency at Hong Kong-Zhuhai-Macao Bridge

Following is a question by the Hon Jeremy Tam and a written reply by the Acting Secretary for Security, Mr Sonny Au, in the Legislative Council today (June 20):

#### Question:

According to the Inter-Governmental Agreement in respect of the Construction, Operation, Maintenance and Management of the Hong Kong-Zhuhai-Macao Bridge, signed by the governments of Hong Kong, Guangdong Province and Macao in 2010, the three said governments will adopt the "territoriality principle" in respect of the operation and management of the Hong Kong-Zhuhai-Macao Bridge (HZMB). The three governments will handle various issues within their own jurisdictions in accordance with the respective local laws. Regarding the rescue arrangements for incidents that have occurred on the Hong Kong Link Road (HKLR) of HZMB, which is within Hong Kong's jurisdiction, will the Government inform this Council:

- (1) when an incident involving personal injuries has occurred on a lane (i) in the Hong Kong-bound direction and (ii) in the Mainland-bound direction of HKLR, of the respective routes to be taken by ambulances (a) going from the ambulance depot(s) to the scene and (b) conveying the injured persons from the scene to the North Lantau Hospital (NLH);
- (2) whether the ambulance routes mentioned in (1) will involve travelling on the shoulder in the opposite direction of the traffic; if so, whether there are measures in place to ensure traffic safety; if there are such measures, of the details and whether such measures include temporarily closing off the lane adjacent to the shoulder; if not, the reasons for that;
- (3) of the journey distance of conveying injured persons from a section of HKLR closest to the boundary to NLH, and the respective estimated journey times during rush and non-rush hours;
- (4) when a traffic accident involving a number of injured persons has occurred at a section of HKLR closest to the boundary, making it necessary for ambulances to divert some of the injured persons to public hospitals

other than NLH (such as the Princess Margaret Hospital), of (i) the journey distances and (ii) the estimated journey times of conveying the injured persons from the scene to such hospitals respectively;

- (5) of the circumstances under which the authorities will arrange for the Government Flying Service to send helicopters to convey injured persons from HKLR to public hospitals; and
- (6) whether the authorities have plans to arrange for maritime rescue teams to take part in the rescue operations on HKLR; if so, of the details (including the government departments involved)?

### Reply:

President,

Emergency rescue departments in Hong Kong will draw up emergency and rescue plans and conduct drills in response to possible emergencies at the Hong Kong-Zhuhai-Macao Bridge (HZMB) Main Bridge, Hong Kong Link Road (HKLR) or Hong Kong Port. The rescue departments in Hong Kong, Macao and the Mainland will also establish a liaison mechanism and keep in close contact for co-ordination and mutual support when necessary, so as to ensure prompt and appropriate care to casualties.

Having consulted the relevant departments, my reply to various parts of the Hon Jeremy Tam's question is as follows:

(1) & (2) Should there be any emergency at the HKLR involving vehicles heading to Hong Kong, ambulances will attend the scene by making a U-turn at one of the turnaround facilities (one near San Shek Wan and the other on the HZMB eastern artificial island) depending on the incident location to offer emergency ambulance service to casualties. The casualties will be conveyed to Hong Kong hospitals for treatment after being handled at the scene.

Under the same principle, in case of emergencies at the HKLR involving vehicles heading to Zhuhai, ambulances will take the Zhuhai-bound lane to attend the scene. Upon handling the casualties at the scene, ambulances can make a U-turn back to Hong Kong at the turnaround facility near San Shek Wan or the one on the HZMB eastern artificial island and convey the casualties to hospitals for treatment.

Whether it is necessary for the rescue vehicles to run in the opposite direction of the traffic on the HKLR when performing duties will be determined in the light of the actual circumstances and needs. Where necessary, the Police will offer assistance to facilitate the ambulances to attend the scene soonest possible for safely conveying the casualties to hospitals.

(3) & (4) The driving distance for conveying casualties from the boundary between Hong Kong and Guangdong of the HZMB to the North Lantau Hospital (NLH) is about  $20~\rm km$ .

If the incident involves a large number of casualties, the Hong Kong Fire Services Department (FSD) will divert the casualties to different hospitals for treatment in accordance with the triage system established with the Hospital Authority. This system is well-tested as it was established having regard to past experience of major incidents and the reviews conducted afterwards.

The actual travelling time from the boundary between Hong Kong and Guangdong of the HZMB to the NLH or other hospitals is subject to numerous factors. The FSD will work closely with other departments to ensure that the ambulances will be able to convey the casualties to hospitals for treatment in a rapid and safe manner.

- (5) One of the major responsibilities of the Government Flying Service (GFS) is search and rescue operations. If there is a need for assistance in an incident, particularly when the traffic is so packed at the scene, the Hong Kong Police Force (HKPF) and the FSD may request the GFS for assistance in the rescue operation, including providing air ambulance service under safe conditions, conveying the casualties to hospitals for treatment or transporting personnel, tools and kits, medical supplies, etc. to facilitate the rescue operation.
- (6) If maritime search and rescue is needed, relevant departments (including the Marine Department (MD), the HKPF and the FSD, etc.) will carry out rescue operations under the "Contingency Plan for Maritime and Aeronautical Search and Rescue". The Maritime Rescue Co-ordination Centre of the MD is responsible for co-ordinating the search and rescue operations. Where necessary, the marine departments of Guangdong and Hong Kong will conduct joint search and rescue operations in accordance with the existing cooperation mechanism.

# LCQ8: Future plans for public wholesale food and fish markets

Following is a question by the Hon Steven Ho and a written reply by the Secretary for Food and Health, Professor Sophia Chan, in the Legislative Council today (June 20):

### Question:

Some members of the public have relayed to me that in the vicinity of certain public wholesale food and fish markets, quite a number of residential developments have been completed in recent years, and the operation of such markets has affected the daily lives of nearby residents. They also hold the

view that some of these wholesale markets are well poised to be developed into facilities with tourism appeal. Regarding the future plans for those markets, will the Government inform this Council:

- (1) whether it will identify suitable locations for the reprovisioning of the Cheung Sha Wan Temporary Wholesale Poultry Market and the North District Temporary Wholesale Market for Agricultural Products, so that the sites thus vacated can be planned afresh for other uses which will dovetail with community needs; if so, of the details and the implementation timetable; if not, the reasons for that; and
- (2) whether it will, by making reference to successful examples (e.g. the Pike Place Market in Seattle, the United States, the Tsukiji Fish Market in Tokyo, Japan and the Fish Market in Bergen, Norway), study ways to enhance the benefits that may be brought by public wholesale markets, e.g. converting the Aberdeen Wholesale Fish Market into an integrated facility that brings together a market for trading fisheries products, seafood restaurants and outlets for local products, so as to boost the development of the fisheries industry and the tourism industry; if so, of the details and the implementation timetable; if not, the reasons for that?

### Reply:

President,

My reply to various parts of the question is as follows.

(1) The Civil Engineering and Development Department has commissioned a technical consultancy study on potential sites for relocating a number of existing wholesale markets (including Cheung Sha Wan Temporary Wholesale Poultry Market) and for other industrial uses in North West Tsing Yi. The study is expected to be completed in 2020. The Government will consult relevant stakeholders, having regard to the outcome of the above study and other considerations.

On the other hand, the North District Temporary Wholesale Market for Agricultural Products to be affected by the proposed construction of the Fanling Bypass Eastern Section will be reprovisioned to an adjacent site in phases. Funding approval for the project would be sought from the Legislative Council in the first quarter of 2019.

(2) The aim of establishing wholesale food markets is to facilitate the wholesaling activities of the trade. In considering whether such markets could be used for purposes or hosting public events other than wholesaling, we have to ensure the purpose or event concerned would not affect the normal operation of the markets as well as the safety of the public participating in the events. The primary function of the Aberdeen Wholesale Fish Market (AWFM) is to provide wholesale services for fish buyers. AWFM is already running in its full capacity. In the past, relevant Government departments had examined if the market could be developed into a tourist spot, but concluded that there lacked a number of elements to make it a success. In

addition, in order to provide commercial facilities in AWFM, the safety issue arising from the gathering of a large number of tourists in the market must be properly addressed, and planning and land use approvals have to be obtained. The proposal involves many stakeholders and a variety of complicated technical issues. The proposal's commercial viability as well as attractiveness to operators of restaurants and tourist facilities also have to be considered.