

## LCQ22: Making good use of reservoirs for leisure purpose

Following is a question by the Hon Tony Tse and a written reply by the Secretary for Development, Ms Bernadette Linn, in the Legislative Council today (June 28):

Question:

There are views that Hong Kong has many man-made reservoirs that are as picturesque as natural lakes. However, owing to the need to safeguard fresh water supply and safety, there are restrictions on the leisure activities among the public and visitors in reservoirs and the associated catchments. In addition, some reservoirs, due to their smaller storage capacities, in fact have limited contributions to the supply of fresh water, the Government should consider discontinuing the use of such reservoirs for water supply purpose and making good use of them for other purposes, so as to achieve cost savings in repairs and maintenance of the relevant water supply systems. In this connection, will the Government inform this Council:

(1) of the water supply quantities of Dongjiang water and reservoirs, and their proportion in the overall fresh water consumption in Hong Kong in each of the past five years; whether the authorities have made projections on the future water supply proportion of Dongjiang water and various reservoirs and developed a water supply strategy;

(2) of the reservoirs currently still in use for water supply, their storage capacities and surface areas, as well as the average actual water supply quantities, and repair and maintenance expenses involved in each of the past five years (set out in a table);

(3) of the number of cases (including those in which warnings were issued, arrests were made, prosecutions were instituted and convictions were handed down) involving the violation of the Waterworks Ordinance (Cap. 102) and the Waterworks Regulations (Cap. 102A) in reservoirs or the catchment areas in the past five years, and the major offences involved; whether it has studied if there is room to suitably relax some of the restrictions specified in Cap. 102 and Cap. 102A (e.g. the requirement for a fishing licence when fishing in reservoirs, and restrictions on swimming and rowing in reservoirs);

(4) whether it will review the use of certain reservoirs with smaller storage capacities to enhance the promotion of a water-friendly culture, and meet the leisure needs of the public and visitors;

(5) as it has been reported that the pleasure boat operations in Wong Nai Chung Reservoir Park have resumed since 2021, of the utilisation of such facility since its resumption of operation; whether the authorities will consider introducing additional leisure facilities to the Park to provide convenience for and attract visitors; and

(6) as it is learnt that the originally abandoned Jordan Valley Reservoir and Ma Yau Tong Reservoir have been converted for other uses, whether there are other existing abandoned reservoirs in Hong Kong; if so, of the authorities' plans to optimise their uses?

Reply:

President,

There are no natural lakes, large rivers or abundant underground water source in Hong Kong. To meet Hong Kong's fresh water demand, we need sufficient water storage facilities (i.e. impounding reservoirs) to collect and store rainwater, and temporarily store part of the water imported from Dongjiang in Guangdong Province. Currently, there are 17 reservoirs of this kind in Hong Kong. With the peaceful and scenic environment, these reservoirs are very popular outing and fishing spots for citizens. Therefore, we are pleased to allow citizens to fish and engage in outing activities around the reservoirs on the condition that fresh water sources stay free from pollution.

The replies to various parts of Hon Tse's question are as follows:

(1) Currently, Hong Kong's fresh water supply mainly comes from rainwater collected from local catchment areas and Dongjiang water imported from the Guangdong Province. The total supply quantities and the proportions of these two water sources over the past five years are as follows:

Year	Local Yield (million cubic metres)	Dongjiang Water (million cubic metres)	Total supply quantity (million cubic metres)
2018	277 (27%)	736 (73%)	1 013
2019	278 (28%)	718 (72%)	996
2020	225 (22%)	802 (78%)	1 027
2021	244 (23%)	811 (77%)	1 055
2022	256 (24%)	810 (76%)	1 066

Note: The numbers in parentheses indicate the percentages of the total fresh water supply of that year.

To ensure the stability of Hong Kong's water supply and support its sustainable development, the Water Supplies Department (WSD) has formulated the Total Water Management Strategy and adopted a two-pronged approach by controlling the increase in water demand on one hand and enhancing supply stability through diversified water sources on the other hand, including the utilisation of seawater desalination to supplement fresh water supply so as to combat the impact of climate change. In the foreseeable future, local yield and Dongjiang water will still be Hong Kong's main sources of fresh water, accounting for about 90 per cent of the total fresh water consumption. The rest will be supplemented by seawater desalination.

(2) In addition to storing local yield, some impounding reservoirs are also used for storing Dongjiang water temporarily. Furthermore, many reservoirs are interconnected through transfer networks to allow water sources to be transferred as needed to increase supply flexibility. Therefore, we are unable to provide the quantity of water supply of each reservoir. Maintenance of a reservoir mainly includes the upkeep of relevant facilities such as drainage systems, road signs, landscaping and safety facilities. As improvement works, such as installation of additional piezometers, improvement of existing pipeworks and addition of greening facilities, may also be involved during the maintenance works, we do not have a separate breakdown solely for the maintenance expenditure for reservoirs.

The areas and storage capacities of all the impounding reservoirs are tabulated below:

Reservoir	Approximate surface area (square metres)	Approximate capacity (million cubic metres)
High Island Reservoir	6 950 000	281
Plover Cove Reservoir	12 122 000	230
Shek Pik Reservoir	1 040 000	24
Tai Lam Chung Reservoir	1 659 000	20
Shing Mun Reservoir	615 000	13
Lower Shing Mun Reservoir	245 000	4.3
Kowloon Reservoir	164 000	1.6
Kowloon Byewash Reservoir	57 000	0.8
Shek Lei Pui Reservoir	61 000	0.4
Kowloon Reception Reservoir	39 000	0.1
Tai Tam Tuk Reservoir	389 000	6
Tai Tam Upper Reservoir	123 000	1.5
Tai Tam Intermediate Reservoir	88 000	0.7
Tai Tam Byewash Reservoir	24 000	0.1
Aberdeen Upper Reservoir	77 000	0.8
Aberdeen Lower Reservoir	57 000	0.5
Pok Fu Lam Reservoir	39 000	0.2

(3) Pursuant to the Waterworks Ordinance (Cap. 102) and the Waterworks Regulations (Cap. 102A), any person who pollutes water of the waterworks or fishes in the water of the waterworks without complying with the conditions of the fishing licence, shall be guilty of an offence. Once a violation is discovered, the WSD will arrest and prosecute the person concerned direct without a warning. The numbers of the relevant prosecutions and convictions over the past five years are as follows:

	Contravention	Year					Total
		2018	2019	2020	2021	2022	
Prosecution	Pollution	5	8	20	32	14	79
	Illegal fishing	19	39	19	27	12	116
Conviction of the prosecution in the year	Pollution	5	8	19	31	14	77
	Illegal fishing	18	39	17	25	12	111

The WSD has been issuing fishing licences to allow the public to enjoy fishing in reservoirs in compliance with the licence conditions, and at the same time, ensure that such fishing activities do not affect the ecology and environment of the reservoirs. To accord with public expectation, the WSD has relaxed the fishing period since April last year to allow anglers holding valid fishing licences to fish in all reservoirs in Hong Kong throughout the year, in contrast to the previous arrangement which only allowed fishing from September of each year to March of the following year. As regards swimming and rowing in reservoirs, the WSD has no plan at this moment to relax the restriction of such activities having considered that such activities will highly increase the risk of the water in reservoirs being polluted.

(4) Since local yield is still one of Hong Kong's major sources of fresh water, we have to retain all existing impounding reservoirs (including those with smaller capacities) for catchment and temporary storage of Dongjiang water to safeguard the sustainability of water supply.

(5) The Wong Nai Chung Reservoir has not been a waterworks for storage of water for potable purpose since the 1980s, after its conversion to the existing Wong Nai Chung Reservoir Park by the former Urban Council for opening to the public. The Wong Nai Chung Reservoir Park is now under the management of the Leisure and Cultural Services Department (LCSD). According to the LCSD, the light refreshment and boat hiring business at Wong Nai Chung Reservoir Park began to operate on May 1, 2021 with the contract expiry on April 30, 2024. The operator has equipped with two rowing boats and 15 pedal wheel boats for hire during the business hours on Saturdays, Sundays and public holidays. Currently, the daily patronage of Wong Nai Chung Reservoir Park during Sundays or public holidays is about 2 000. The LCSD has also arranged renovation of the facilities of the venue and works for beautification and improving the landscape with a view to attracting the public.

(6) The "Jordan Valley Reservoir" and the "Ma Yau Tong Reservoir" mentioned in the question are in fact the Jordan Valley Salt Water Service Reservoir and the Ma Yau Tong Salt Water Service Reservoir, which are different from the aforementioned impounding reservoirs used for collecting and storing rainwater, and temporarily storing Dongjiang water. They were originally used for storing salt water for supplying flushing water to their supply areas and were subsequently reconstructed for other purposes to meet other projects'

needs at that time. According to records of the WSD, there are currently no abandoned reservoirs in Hong Kong.