



Providing an adequate water supply for Hong Kong has always been difficult because there are no natural lakes, rivers or substantial underground water sources. The annual rainfall averages 2 398.5 millimetres but this is insufficient to meet current demands — the average daily consumption of potable water during 2017/18 being 2.72 million cubic metres.

The Water Supplies Department is a government department providing potable water to the people living within the Hong Kong Special Administrative Region. The department also supplies sea water for flushing.

Sources of Water: Hong Kong's two main sources of water are rainfall from natural catchments and Dongjiang water from Guangdong Province. Shortage of natural storage reservoir sites led to the construction of Hong Kong's first 'reservoir in the sea' at Plover Cove. The initial scheme, completed in 1967, was created by damming, and draining an inlet of Tolo Harbour and had a storage of 170 million cubic metres. The storage was increased in 1973 to 230 million cubic metres by raising the dam. A similar but larger scheme at High Island, completed in 1978, has a capacity of 281 million cubic metres. The total storage capacity of Hong Kong's reservoirs is 586 million cubic metres.

Supply from Guangdong: Dongjiang is Hong Kong's major source of water. Dongjiang water first started to be supplied to Hong Kong in 1965. Today, about 70-80 per cent of water comes from Dongjiang by arrangement with the Guangdong authorities. 664 million cubic metres of Dongjiang water was imported in 2017/18. The Dongshen-Hong Kong water supply system is designed to be capable of providing Hong Kong with 1.1 billion cubic metres per annum.

Sea Water for Flushing: An interesting facet of the waterworks is the sea water supply systems with their separate networks of distribution mains, pumping stations and service reservoirs. In 2017/18, an average of about 756 000 cubic metres of sea water was supplied each day.

Consumption (in million cubic metres):

Fresh Water	2016/17	2017/18
Annual	977.56	992.55
Daily Average	2.68	2.72
Highest Daily	2.96	2.93
Sea Water		
Annual	265.16	276.03
Daily Average	0.73	0.76

Rainfall and Yield: About one-third of Hong Kong's 1 098 square kilometres has been developed as water catchments.

	2016/17	2017/18
<i>Rainfall (in mm)</i>		
Rainfall recorded by the Hong Kong Observatory	2 662.1	2 585.8
Average rainfall recorded in water catchments	2 522.3	2 474.2
<i>Yield (in million cubic metres)</i>		
Yield from catchment areas		
Old Reservoirs	132.93	100.17
Plover Cove and High Island Systems	210.76	202.22
Water Received from Guangdong by pipeline	629.05	663.58
Total	972.74	965.97

Reservoir Storage: Hong Kong is dependent on adequate storage for the maintenance of a regular supply. The reservoirs and their storage capacities are tabulated below:

Reservoir	Year on Supply	Storage Capacity ^{m³}
Pok Fu Lam	1877	233 000
Tai Tam Upper	1889	1 490 000
Tai Tam Byewash	1904	80 000
Tai Tam Intermediate	1907	686 000
Kowloon	1910	1 578 000
Tai Tam Tuk	1917	6 047 000
Shek Lei Pui	1925	374 000
Reception	1926	121 000
Aberdeen (2 Res.)	1931	1 259 000
Kowloon Byewash	1931	800 000
Shing Mun (Jubilee)	1936	13 279 000
Tai Lam Chung	1957	20 490 000
Shek Pik	1963	24 461 000
Lower Shing Mun	1965	4 299 000
Plover Cove	1968	229 729 000
High Island	1978	281 124 000

Consumer Services:

	2016/17	2017/18
Additional no. of accounts (nett)	48 300	33 300
No. of accounts as at April 1	2 955 400	2 988 700

Water Treatment: The supply is fully treated by chemical coagulation, sedimentation (at most treatment works), filtration, disinfection by chlorination, pH value adjustment, chlorination and fluoridation. The drinking water is soft in character and conforms fully to the Guidelines for Drinking-water Quality recommended by the World Health Organization.