



船灣淡水湖

Plover Cove



船灣淡水湖是香港第二大水塘，亦是全球第一個在海中興建的水塘，位於八仙嶺及船灣郊野公園。水塘的龐大興建工程是一個史無前例的項目，工程師用堤壩把海灣攔起，再將海水抽出，然後收集雨水作淡水儲存。建築工程於1960年展開，並於1968年建成，當時容量達1.7億立方米。其後於1970年開始進行堤壩加高工程，並於1973年完成後，水塘容量增至2.3億立方米。船灣淡水湖的堤壩長約2公里，用沙和碎石分層堆砌而成。

The Plover Cove Reservoir, located in the Pat Sin Leng and Plover Cove Country Park, is the second largest reservoir in Hong Kong. It is also the first "reservoir in sea" in the world. The massive construction work of the reservoir is a project that had never been attempted anywhere in the world. Engineers dammed the inlet, pumped out the sea water and filled it with fresh water. The construction work was commenced in 1960 and completed in 1968, providing a capacity of 170 million cubic meters. The works on raising the height of the dam began in 1970. Upon completion in 1973, the reservoir capacity was increased to 230 million cubic meters.

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Plover Cove Reservoir

在50年代，人口增長和經濟發展使社會對食水的需求急劇上升，水資源供不應求。有一天，當時水務局局長毛謹先生在船灣海遊船河時，想到用堤壩攔起把船灣海，透過抽出海水後注入淡水，建成水塘。「船灣淡水湖計劃」便於1960年展開。

這個工程計劃相當繁複，除了興建大型水壩外，還包括濾水廠、各抽水站、水管管網等配套設施，例如沙頭角半島與八仙嶺一帶山脈興築引水道、大美督抽水站、大埔頭抽水站、從大埔至沙田的引水隧道、下城門水塘、3條由大埔往沙田的雙程隧道、沙田濾水廠、於其中鋪設水管通往九龍市區的獅子山隧道、輸水至港島的海底水管、獅子山配水庫，以及慈雲山配水庫等。

水塘在1968年建成後，食水自船灣淡水湖的抽水站起，由大埔頭輸送至沙田濾水廠作處理，並經由抽水站輸送到多個沙田區的配水庫及九龍獅子山的配水庫群，再分配給用戶。



In the 1950s, the demand for drinking water in the society grew rapidly due to the expanding population and economic development. Water was undersupplied. One day, when the Director of Water Supplies Mr. T.O. Morgan was on a boat trip in the Plover Cove, he had a sudden thought of transforming the bay into a reservoir by damming the sea inlet, pumping out the sea and filling with fresh water. As such, the government started the "Plover Cove Reservoir Project" in 1960.

The construction of the project was complicated. In addition to the construction of large dams, it also included the construction of supporting facilities of water treatment works, pumping stations and water distribution network, such as the catchwater at the mountain ranges of Sha Tau Kok Peninsula and Pat Sin Leng, the Tai Mei Tuk Water Pumping Station, Tai Po Tau Water Pumping station, the catchwater tunnel from Tai Po to Sha Tin, Lower Shing Mun Reservoir, 3 two-way tunnels from Tai Po to Sha Tin, Sha Tin Water Treatment Works, main laying in Lion Rock Tunnel connecting to Kowloon area, the submarine main distributing water to Hong Kong Island, Lion Rock Service Reservoir and Tsz Wan Shan Service Reservoir, etc.

With the completion of the reservoir in 1968, fresh water is pumped from the pumping station of Plover Cove Reservoir and then delivered from Tai Po Tau to Sha Tin Water Treatment Works for water treatment. Subsequently, the water is pumped to service reservoirs in Sha Tin and service reservoirs group in Lion Rock in Kowloon for distribution to consumers.

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大埔頭原水抽水站

Tai Po Tau Raw Water Pumping Station

大埔頭原水抽水站共有4期，分別於1964、1973、1984及1994年啟用。大埔頭抽水站裝有一條氣壓控制升降的尼龍水壩，將船灣淡水湖、大埔林村河及坳頭河道的淡水互相抽調，攔截林村河水抽入大埔頭至下城門水塘隧道，並調節大埔林村河以北及抽水站附近的河道。該類尼龍水壩是由美國加州一位工程師於1957年發明，它採用抗油性可膨脹的物質製造。

There are 4 phases in Tai Po Tau Water Pumping Station, which opened in 1964, 1973, 1984 and 1994. The Tai Po Tau Pumping Station is equipped with a pneumatically controlled lifted nylon dam. It is used to divert fresh water between the Plover Cove Reservoir, Tai Po Lam Tsuen and Tai Po Tsuen Road, and intercept the Lam Tsuen River water to pump water into Tai Po Tau and Lower Shing Mun Reservoir tunnel, as well as modulating the rivers in the north of Lam Tsuen River and in the vicinity of the pumping station. This type of nylon dam was invented in 1957 by an engineer in California, U.S., using oil-resistant expandable materials.



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獅子山高地食水主配水庫

Lion Rock High Level Fresh Water Primary Service Reservoir

獅子山高地食水主配水庫是「船灣淡水湖計劃」的一部分，容量達102,587立方米。食水自船灣淡水湖的抽水站起，由大埔頭至沙田濾水廠，在過濾後，經由抽水站輸送到多個沙田區的配水庫及九龍獅子山的配水庫群，再分配給用戶。

全港共有超過220個配水庫，配水庫的作用在於短暫儲存食水或海水，以應付每天耗水高峰期的需求，亦有助控制供水水壓。在輸水幹管未能運作時，備存的食水或海水亦可充當緩衝，維持供應。

Lion Rock High Level Fresh Water Primary Service Reservoir is part of the Plover Cove Water Scheme, with a capacity of 102,587 cubic meters.

Fresh water is pumped from the pumping station of Plover Cove Reservoir and then delivered from Tai Po Tau to Sha Tin Water Treatment Works for water treatment. After that, the water is pumped to service reservoirs in Sha Tin and service reservoirs group in Lion Rock in Kowloon for distribution to consumers. There are more than 220 service reservoirs in Hong Kong. Their role is to temporarily store fresh water or sea water to meet the peak demand of water consumption every day. It also helps control the water supply pressure. When the main water channels fail to operate, the stored water or sea water in service reservoirs can also act as a buffer to maintain adequate supply.

