水務署
WATER SUPPLIES DEPARTMENT

年報Annual Report 2018/19

優質供水　用心服務

水務署的工作關乎社會大眾的福祉，因此在確保優質供水的同時，用心服務亦至為重要。

本年報的封面以一家人快快樂樂地暢遊於水塘畔，表達了我們的願景：水能滋潤好生活。這幅圖片正好傳遞著本署肩負起提供優質供水以及珍惜水資源的使命。

WHOLESOME WATER　CARING SERVICE

At Water Supplies Department (WSD), we understand the connection between our work and society's welfare. For this reason, we take measures not only to ensure the quality of Hong Kong's water supplies, but also to provide our services with sincerity.

This report cover shows a family enjoying their day near the reservoir, reflecting our vision of how water nurtures everyone's lives. This photo shows our mission to provide quality water supplies and preserve our water resources with an earnest heart.

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主要統計數字(截至二零一九年三月三十一日)
Principal Statistics (as of 31st March 2019)

水塘數目
No. of Impounding Reservoirs
17 個 nos

總容量
Total Storage Capacity
586 百萬立方米 million m³

食水抽水站數目
(包括食水和原水抽水站及泵房)
No. of Fresh Water Pumping Stations
(includes fresh & raw water pumping stations and pump houses)
153 個 nos

總抽水量
Total Pumping Capacity
32.2 百萬立方米/日 million m³/day

食水及海水抽水站數目
No. of Combined Fresh Water & Salt Water Pumping Stations
7 個 nos

總抽水量
Total Pumping Capacity
0.3 百萬立方米/日 million m³/day

食水配水庫數目
No. of Fresh Water Service Reservoirs
174 個 nos

總容量
Total Storage Capacity
4.3 百萬立方米 million m³

濾水廠數目
No. of Water Treatment Works
20 個 nos

總濾水量
Total Water Treatment Capacity
5.4 百萬立方米/日 million m³/day

海水抽水站數目
(包括泵房)
No. of Salt Water Pumping Stations
(includes pump houses)
35 個 nos

總抽水量
Total Pumping Capacity
2.1 百萬立方米/日 million m³/day

食水水管長度
(直徑20毫米至2,400毫米)
Length of Fresh Water Mains
(20 mm to 2,400 mm diameter)
6,639 公里 km

海水水管長度
(直徑20毫米至1,200毫米)
Length of Salt Water Mains
(20 mm to 1,200 mm diameter)
1,635 公里 km

海水配水庫數目
No. of Salt Water Service Reservoirs
54 個 nos

總容量
Total Storage Capacity
0.3 百萬立方米 million m³

主要工作表現指標
Key Performance Indicators

指標 Indicators	財政年度 Financial Year 16/17	17/18	18/19
食水水質 100%符合香港食水標準* Fresh Water Quality 100% compliance with the Hong Kong Drinking Water Standards*	達到指標 Target achieved	達到指標 Target achieved	**達到指標 Target achieved**
海水水質 96%符合水務署所定的水質指標** Salt Water Quality 96% compliance with WSD Water Quality Objectives**	達到指標 Target achieved	達到指標 Target achieved	**達到指標 Target achieved**
食水供水水壓(15至30米)^ Fresh Water Supply Pressure (15 – 30 metres) ^	100%	100%	**100%**
海水供水水壓(15米)^ Salt Water Supply Pressure (15 metres) ^	100%	100%	**100%**
因預先計劃進行的工程而暫停供水的時間長度 (98%於八小時內) Water Supply Suspension Duration for Planned Work (98% within 8 hours)	達到指標 Target achieved	達到指標 Target achieved	**達到指標 Target achieved**
水錶準確程度 (偏差程度不超過±3%) Water Meter Accuracy (inaccuracy not exceeding ± 3%)	97.3%	97.7%	**97.7%**

* 本署自二零一七年九月起開始採用香港食水標準為指標，而在此之前，則一直採用世界衞生組織制訂的《飲用水水質準則》為指標。
The Hong Kong Drinking Water Standards have been adopted by WSD in the target since September 2017. Before that, the World Health Organization's Guidelines for Drinking–water Quality was adopted in the target.

** 此指標於二零一八至一九年度經修訂，藉以反映水質達標點已由供水接駁位置擴展至客戶處。二零一七至一八年度及二零一六至一七年度所採用的指標為「海水水質(供水接駁位置)—96%符合水務署所定的水質指標」。
The target for 2018/19 has been revised in order to reflect the extension of the point of compliance from connection points to customer ends. Target in 2017/18 and 2016/17 was "Salt water quality (at connection points) - 96% compliance with WSD Water Quality Objectives".

^ 配水系統內(不包括系統盡頭)最低的剩餘水壓。
Minimum residual pressure in the distribution systems except at their extremities.

二零一八至一九年度回顧
2018/19 at a Glance

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四月

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Ma On Shan Water Treatment Works Open Day 2018

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五月

22/04/2018
香港水足印定向 2018
Hong Kong Water Race 2018

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活水・行 2018
Walk for Living Water 2018

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點滴捐水Walk & Run 2018
Walk & Run for Water 2018

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Hong Kong Green Day 2018 Closing Ceremony cum Green Mission Challenge

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世界環境日2018 — 零廢FUN墟
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合約編號3/WSD/18 - 2016至2017年度水務署斜坡預防性維修、改善及相關的勘探工程合約簽署儀式
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國際環保博覽2018
ECO Expo Asia 2018

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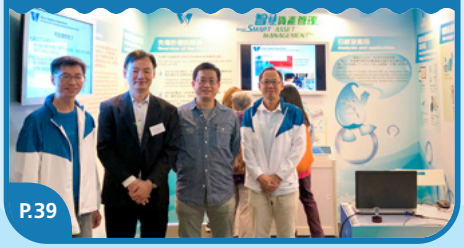
創新科技嘉年華2018
InnoCarnival 2018



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合約編號6/WSD/18 - 水務署天水圍大樓水資源教育中心裝修、展覽及相關工程合約簽署儀式
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著綠狂奔2019
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部門總覽
Corporate Profile

穩定及優質的供水對本港居民的生活不可或缺，同時亦是支持本港可持續發展的關鍵要素。香港特別行政區政府水務署負責維持供水可靠優質。

Reliable and quality water supplies are indispensable to the lives and livelihood of the people in Hong Kong, and are critical for supporting the Territory's sustainable developments. The Hong Kong SAR Government's Water Supplies Department (WSD) is charged with the responsibility of maintaining reliable and quality water supplies.

本港17個水塘集水區收集的本地雨水約佔香港總食水用量20%至30%，餘下部分的食水由廣東省的東江輸入，兩者均經過嚴格處理及監測，務求食水水質符合根據世界衞生組織(世衞)《飲用水水質準則》制訂的香港食水標準。此外，自一九五零年代以來，本署充分利用香港近海的地理優勢，將海水用作沖廁用途。食水及海水由兩個完全獨立的供水系統供應。它們透過龐大的配水庫和水管網絡，配送至各家各戶及商用物業。

Approximately 20% to 30% of Hong Kong's fresh water supply comes from local yield collected in catchment areas of the Territory's 17 impounding reservoirs. The remaining fresh water supply comes from Dongjiang in Guangdong. Both the collected local yield and the imported Dongjiang water are subject to stringent treatment and monitoring so as to ensure that the quality of treated water meets the Hong Kong Drinking Water Standards (HKDWS), which currently follow the Guidelines for Drinking-water Quality published by the World Health Organization (WHO Guidelines). Moreover, since the 1950s, WSD has taken full advantage of Hong Kong's geographic proximity to the ocean to adopt salt water for flushing purposes. Fresh water and salt water are supplied through two entirely separate supply systems. An extensive array of service reservoirs and water mains provide these water supplies for distribution to homes and commercial developments.

為確保香港供水穩健及具應變能力，本署繼續透過海水化淡及中水重用等技術開拓新水源，進一步提升香港的供水保障及應對氣候變化的能力。

To ensure the security and resilience of Hong Kong's water supplies, WSD continues to develop new sources of water including desalination and recycled water. These additional sources of water will give Hong Kong enhanced water security and the ability to adapt to climate change.

作為香港最大的能源用戶之一，本署已實施相關措施，透過開發可再生能源及提升能源效益，致力減少碳足跡。本署是香港特區首個獲得ISO 50001:2011能源管理系統認證的政府部門。

As one of the largest energy consumers in Hong Kong, WSD has implemented measures to reduce its carbon footprint as much as possible through the development of renewable energy and enhancing energy efficiency. WSD was the first HKSAR Government department to obtain ISO 50001:2011 Energy Management System certification.

本署的抱負是滿足客戶對優質供水服務的需求。為此，本署人員致力提供以客為本的服務，確保客戶獲得最有效率及優質的服務。

WSD's vision is to excel in meeting customers' needs for quality water services. With this in mind, WSD's committed workforce has adopted a customer-oriented approach to ensure that our customers receive the most efficient and high-quality services.

抱負 Vision

在滿足客戶對優質供水服務的需求，務求有卓越之表現。

To excel in satisfying customers' needs for the provision of quality water services.

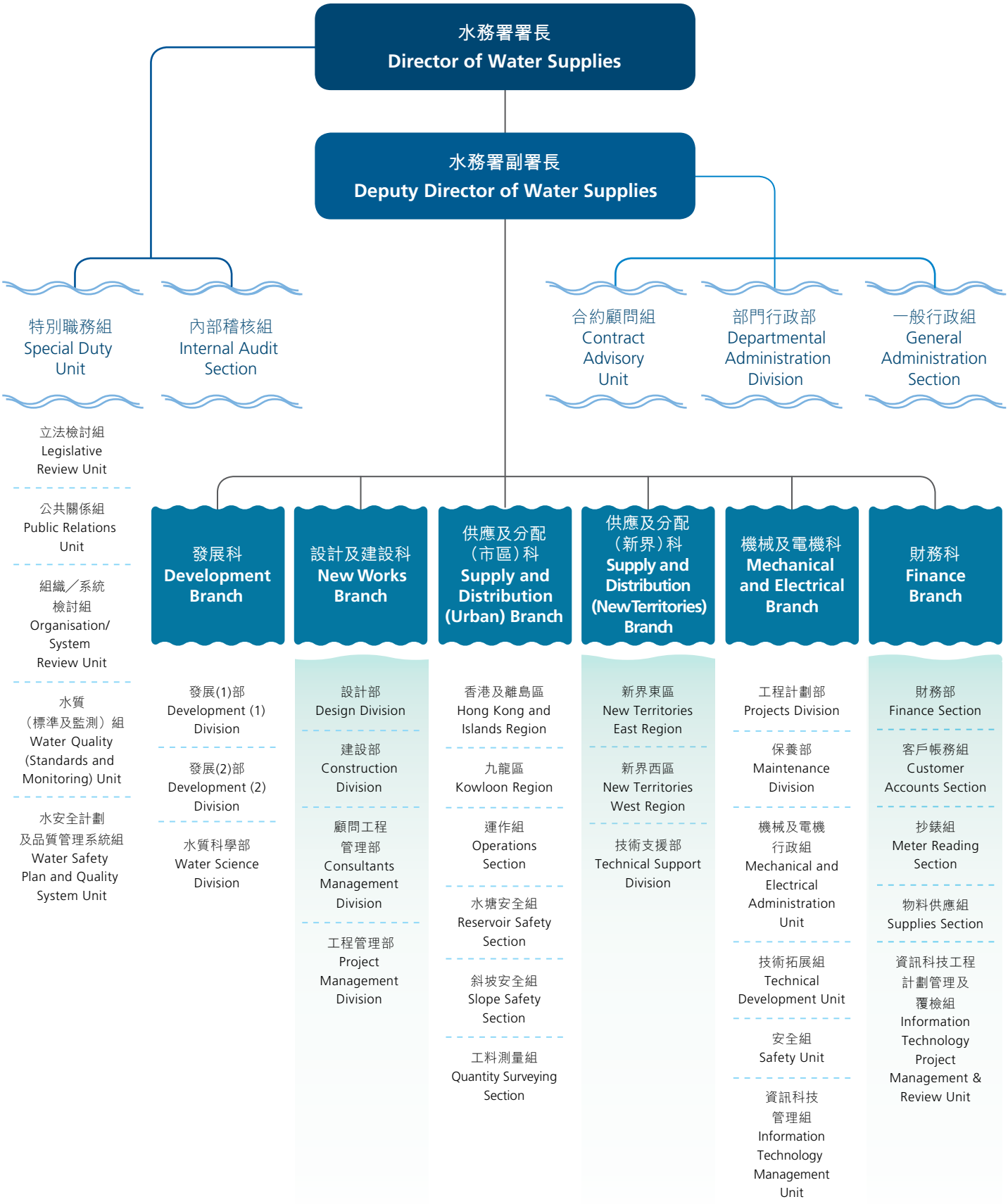
使命 Mission

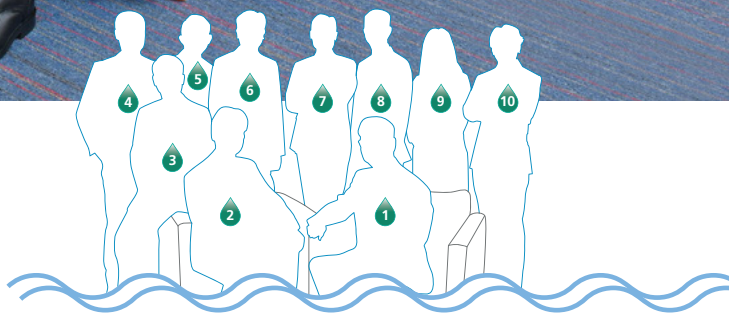
- **以最符合成本效益的方式為客戶提供可靠充足的優質食水及海水。**
  To provide a reliable and adequate supply of wholesome potable water and sea water to our customers in the most cost-effective way.
- **提供以客戶為本的服務。**
  To adopt a customer-oriented approach in our services.
- **維持及激勵一支能幹、高效率及完全投入的工作隊伍，以服務社群。**
  To maintain and motivate an effective, efficient and committed workforce to serve the community.
- **時刻關注對保護環境方面須負的責任。**
  To remain conscious of our responsibilities towards the environment.
- **善用資源和科技，力求不斷改善服務。**
  To make the best use of resources and technology in our striving for continuous improvement in services.

信念 Values

- 以客為本 • Customer satisfaction
- 確保質量 • Reliability
- 重視環保 • Environmental awareness
- 竭盡所能 • Dedication
- 精益求精 • Improvement
- 同心協力 • Teamwork

水務署組織圖
WSD Organisation Chart





1 黃仲良工程師, 太平紳士
Ir. WONG Chung-leung, JP

水務署署長
Director of Water Supplies

2 周世威工程師, 太平紳士[1]
Ir. CHAU Sai-wai, JP[1]

水務署副署長
Deputy Director of Water Supplies

3 彭偉成工程師[2]
Ir. PANG Wai-shing[2]

助理署長／設計及建設
Assistant Director/New Works

4 陳仲勤工程師
Ir. CHAN Chung-kun

助理署長／新界
Assistant Director/New Territories

5 黃俊光先生
Mr. WONG Chun-kwong

助理署長／財務
Assistant Director/Finance

6 吳維篤工程師[3]
Ir. NG Vitus[3]

助理署長／市區
Assistant Director/Urban

7 林聖傑先生
Mr. LAM Saint-kit, Byron

助理署長／特別職務
Assistant Director/Special Duty

8 李大安工程師, 太平紳士
Ir. LEE Tai-on, JP

助理署長／機械及電機
Assistant Director/
Mechanical & Electrical

9 勞淑儀女士[4]
Ms. LO Shuk-yi[4]

部門秘書
Departmental Secretary

10 黃恩諾工程師[5]
Ir. WONG Yan-lok, Roger[5]

助理署長／發展
Assistant Director/Development

[1] 周工程師自2018年7月26日起出任本署副署長。
Ir. CHAU was appointed Deputy Director of Water Supplies on 26th July 2018.

[2] 彭工程師自2019年5月27日起出任本署助理署長／設計及建設。
Ir. PANG was appointed Assistant Director/New Works on 27th May 2019.

[3] 吳工程師自2019年3月20日起出任本署助理署長／市區。
Ir. NG was appointed Assistant Director/Urban on 20th March 2019.

[4] 勞女士自2019年2月4日起出任本署部門秘書。
Ms. LO was appointed Departmental Secretary on 4th February 2019.

[5] 黃工程師自2018年10月29日起出任本署助理署長／發展。
Ir. WONG was appointed Assistant Director/Development on 29th October 2018.

署長的話

Director's Statement

黃仲良工程師*太平紳士*
水務署署長

Ir. WONG Chung-leung, *JP*
Director of Water Supplies

確保我們未來有可持續及具應變力的環境至關重要，此其中包括水資源。這不是單靠任何個人或機構就可以做到，但只要大家眾志成城，一起節約用水、關愛環境，就可以達成我們的目標。

Ensuring a sustainable and resilient future for our environment, including the water resources, is critical. It's a responsibility that's bigger than any individual or organisation, but when we all work together to conserve water and pay attention to our environment, we can achieve our goal.

水是萬物生命之源，與我們的日常生活密不可分，是我們賴以為生的必需資源。供水服務任重道遠，水務署感謝客戶對我們的信賴，我們將致力回饋客戶，滿足他們對優質供水服務的需求。我很高興能夠與一眾勤懇盡責的同事並肩同行，共同實踐抱負，貫徹六大信念：「以客為本」、「確保質量」、「重視環保」、「竭盡所能」、「精益求精」及「同心協力」。

以客為本

本署致力了解客戶的需要，令服務更臻完善。對客戶而言，水安全至為重要。因此，我們現正全面檢討《水務設施條例》和《水務設施規例》，藉以加強規管本港水喉物料及內部供水系統的設計、建造和保養。此外，在本財政年度，我們推行了一項先導計劃，透過成立一支專責隊伍和簡化流程，加快審批餐飲業界的供水申請。計劃取得顯著成效，並且得到業界正面的反饋。我們再接再厲成立了另一支的專責隊伍加快處理不涉及新水管接駁或大量水錶的簡單供水申請。

確保質量

水是我們日常生活中不可或缺的一環，所以確保供水穩定是我們核心的工作。氣候變化會對我們的水資源造成挑戰，本署多年以來一直推行「全面水資源管理策略」以管理有關風險。策略重點是「先節後增」，提倡節約用水，再輔以開拓新水資源。我們現正更新這策略，將用水需求及供應預測涵

Water is the lifeline for all living things. Not only is it a part of our everyday lives, it is essential to them. For this reason, providing water supply services is an important job that requires unwavering dedication. At Water Supplies Department (WSD), we are grateful for the trust that our customers have placed in us, and our vision is to repay that trust by excelling in satisfying their needs for the provision of quality water services. I am very pleased to work with our diligent team to fulfil this vision in a way that embraces our core values of **C**ustomer satisfaction, **R**eliability, **E**nvironmental awareness, **D**edication, **I**mprovement and **T**eamwork (**CREDIT**).

Customer satisfaction

At WSD, we continuously strive to understand our customers' needs and enhance our services to them. Because water safety is a priority for our customers, WSD is conducting a holistic review of the Waterworks Ordinance and Waterworks Regulations, which will strengthen and improve regulatory control over plumbing materials and the design, construction and maintenance of Hong Kong's internal plumbing systems. In addition, in this financial year, we launched a pilot programme that involved a dedicated team and streamlined procedures to accelerate the processing and approval of water supply applications for the catering industry. Building on this programme's success and positive feedback from the trade, we have now set up another dedicated team to expedite the handling of simple water supply applications which do not involve new connections or large numbers of water meters.

Reliability

Because water plays such a pivotal role in our everyday lives, ensuring the reliability of its supply is always our core focus. Our water resources can be challenged by climate change. For years, WSD has managed this risk under its Total Water Management (TWM) Strategy which puts emphasis on containing growth of water demand by promotion of water conservation while developing new water resources. We are updating this strategy with a forecast for water demand and supply up to 2040. Work on demand and

蓋至二零四零年。策略的用水供求管理措施亦已全面展開，當中包括興建海水化淡及循環再用水設施，例如將軍澳海水化淡廠、石湖墟的再造水設施，以及安達臣道石礦場用地發展項目的中水重用系統。策略提出的另一項措施為建立「智管網」，有關工程亦已如火如荼地進行，為地底食水分配管網提供高效智能的監測系統，以有效地發現水管滲漏並進行快速維修，從而減少水資源的流失。與此同時，我們亦展開了「水管資產管理策略」，透過以風險為本的管理方式令供水管網的表現更穩定可靠。

重視環保

確保我們未來有可持續及具應變力的環境至關重要，此其中包括水資源。這不是單靠任何個人或機構就可以做到，但只要大家眾志成城，一起節約用水、關愛環境，就可以達成我們的目標。本署一直致力探索嶄新環保方案，例如在水塘及濾水廠分別加裝浮動太陽能板發電系統及水力發電系統等，生產再生能源供我們的設施使用。我們亦積極推展中水供應作沖廁及其他非飲用用途。為此，我們已計劃在二零二零年於安達臣道石礦場用地發展項目中興建一套中水重用系統。另外，為宣揚珍惜用水，鼓勵大家身體力行，我們亦推出了多項公眾宣傳活動，包括惜水學堂及齊來慳水十公升運動等。隨著我們新的水資源教育中心於二零一九年底開幕，學生和公眾可以接收節約用水的資訊，並了解如何為可持續發展的未來出一分力。

竭盡所能

本署上下各同事的傑出表現，一直令我引以為傲，其中他們為守護本港的供水所展現的堅毅與熱誠，更令我深感自豪。二零一八年九月，超強颱風「山竹」襲港，偏遠和離島地區的供水設施遭受破壞，長洲、塔門、鴨洲及吉澳的供水受到影響。我們的團隊迎難而上，在狂風暴雨、樹塌路堵的情況下，在這些偏遠地區不論進行視察或運送緊急維修器材都困難重重，但我們的同事仍然緊守崗位，不惜攀山涉水，為求盡快檢查和搶修供水系統。同時，另一批同事積極安排臨時供水，以解居民燃眉之急。全賴各同事克盡己責、竭誠努力，我們順利扭轉逆境，化解天災所引起的斷水危機。

supply management initiatives under the TWM Strategy is also fully underway including the development of the desalination and water recycling facilities, namely the desalination plant at Tseung Kwan O, the water reclamation facilities at Shek Wu Hui and the grey water recycling system at the Anderson Road Quarry Site Development. Another TWM initiative, the establishment of the Water Intelligent Network (WIN), is also in full swing. WIN will give us a smart and effective way to monitor underground pipelines of our fresh water distribution network, so that we can identify leaks in the pipelines efficiently and repair them quickly to minimise water loss. We are also implementing our Water Main Asset Management Strategy to enhance the reliability of our water supply network through risk-based management approach.

Environmental awareness

Ensuring a sustainable and resilient future for our environment, including the water resources, is critical. It's a responsibility that's bigger than any individual or organisation, but when we all work together to conserve water and pay attention to our environment, we can achieve our goal. At WSD, we devote a lot of resources to finding new ways to reduce our impact on the environment, including harvesting renewable energy for use in our installations by installing floating photovoltaic panels and hydropower systems at our impounding reservoirs and water treatment works respectively. We are also pursuing the supply of treated grey water for flushing and other non-potable uses, and in 2020 we will commence construction of a grey water recycling system at the Anderson Road Quarry Site Development. To raise public awareness and action about water conservation, we have also reached out through multiple campaigns, including our Cherish Water Campus and Let's Save 10 Litres Water Campaign. In late 2019, our new Water Resources Education Centre will open, which will provide students and the general public with information about water conservation and the important role that each and every one of us can play in preserving our sustainable future.

Dedication

Of the many reasons I am proud of WSD's great team, one of the biggest is the dedication with which they safeguard Hong Kong's water supplies. When Super-typhoon Mangkhut hit Hong Kong in September 2018, it damaged our facilities and disrupted water supplies in many rural areas and outlying islands, including Cheung Chau, Tap Mun, Ap Chau and Kat O. Our team rose admirably to meet the challenge. The typhoon and storm conditions made inspections, delivery of equipment for making urgent repairs in these remote areas extremely difficult because many roads were blocked by fallen trees. Our staff braved the challenging conditions and hiked through mountainous trails to look for the damages and make emergency repairs at the earliest possible, while other team members made arrangements for temporary water supply to meet the emergency need of the residents. The hard work and dedication of WSD staff prevented the extreme weather impact from turning into a water crisis.

二零一八年七月水務署正式成為LUOW的成員。
In July 2018, WSD was admitted as a member of the Leading Utilities of the World.

精益求精

為了履行我們提供更卓越客戶服務的使命，我們矢志創新、與時並進，務求令服務更盡善盡美。

二零一八年七月，本署成為Leading Utilities of the World (LUOW)的成員，LUOW是世界頂尖食水及污水公用事業的組織，目前有32個來自世界各地的成員。能夠成為LUOW的會員，是對本署在創新方面取得卓越成就的一項重要肯定。

二零一八年八月，我們的研究及發展督導委員會就本署的研發工作在我們的內聯網推出了全新數據儲存系統。此中央數據儲存系統提供了共享工作平台，便利不同分科和分部的工作。同事可以閱覽、下載和搜尋系統內的所有資料數據，包括來自世界各地的最佳實務方案、最新技術發展等16個水務主題的資訊。我們正推出知識管理平台，進一步促進交流。

同心協力

在我們各方面的工作，同心協力的團隊合作極其重要。本署致力建立友好開放的文化，提供不同溝通渠道，鼓勵同事發表意見和分享構思，並且全面促進創新發展。在二零一九年，我們推出新安排，透過舉行歡迎茶會，讓管理層和新同事互相認識。我很高興能有機會親身與大家進行交流，分享本署的使命與工作。回顧過去一年，我們工作上的每一項成就里程，都是各位同事努力不懈、無私奉獻的成果，能夠與一支這樣優秀投入的團隊並肩前行，我由衷感到驕傲。

展望來年，我們將會繼續上下一心，為香港的廣大市民服務，履行高效安全的優質供水承諾，開拓可持續發展的未來。

黃仲良工程師*太平紳士*
水務署署長

Improvement

Part of our mission to provide excellent customer service is tirelessly seeking new ways to advance and improve.

In July 2018, WSD has been admitted as a member of the Leading Utilities of the World (LUOW), which is a network of the world's top water and wastewater utilities. Currently, there are 32 LUOW members around the world. Having attained membership in LUOW is a testament to the WSD's outstanding achievements in innovation.

In August 2018, our Steering Committee on Research and Development (R&D) launched a new database on the R&D work in WSD in our Intranet homepage. This centralised database system provides a co-working platform to facilitate the work of our various Branches and Divisions. The new system is open to all colleagues to browse, download and explore materials about good practices, technological advances and other various matters in 16 subjects pertinent to water supplies in different parts of the world. We are furthering this task by developing the Knowledge Management Portal in the department.

Teamwork

Teamwork is the heart of every aspect and practice of our organisation. WSD works hard to foster a pleasant and open culture with multiple communication channels to welcome opinions and ideas from our staff, inviting and encouraging innovation at all levels. We launched an initiative in 2019 to host welcome tea gatherings where our management could greet incoming employees. I have been delighted with the opportunity to meet everyone personally and share thoughts about our mission and work. All of our many achievements and triumphs in the past financial year have only been possible with the diligent support and contributions of our staff. I am proud to work with such a talented and dedicated team.

Let's all look forward together to another year of serving the people of Hong Kong, fulfilling our pledge to provide safe, efficient and effective water supplies for our sustainable future.

Ir. WONG Chung-leung *JP*
Director of Water Supplies

供水工作

Work in Water Supplies

竭誠盡心　全面管理
Meticulous Inspections and Attentive Management

“從供水水量到水質，
以至其中牽涉的各個技術層面，
水務署都一直貫徹奉行
嚴格準則。

“From quantity to quality
to every technical aspect in between,
WSD maintains
a high standard
for its water supplies.”

供水管理
Water Supply Management

完善管理規劃 實踐可持續發展
A Comprehensive Management Plan for a Sustainable Future

水務署推行各項水資源管理措施，加強應變力及作好準備，以應對氣候變化。

WSD has launched multiple water resource management initiatives to strengthen our resilience and preparedness in response to climate change.

▲ *香港仔水塘*
Aberdeen Reservoir

檢討可持續供水策略

本署於二零零八年推行「全面水資源管理策略」(「策略」)，以制訂水資源的可持續使用策略，確保本港供水安全及應付未來發展需要。「策略」強調透過推廣節約用水以控制供水需求增長，並開拓新水源。其提出的主要措施包括加強節約用水的公眾教育、推廣節水產品的使用、改善用水流失管理、擴大海水沖廁的覆蓋範圍、鞏固對現有水資源的保護，以及積極開拓新水源。

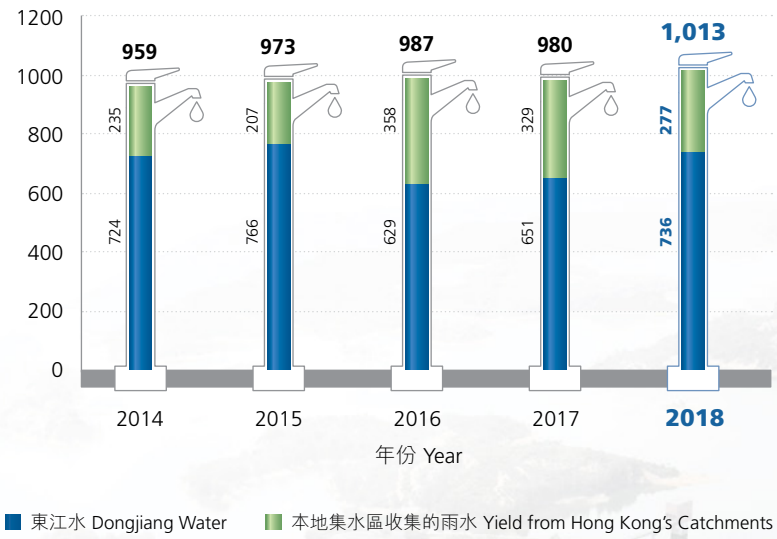
REVIEWING OUR STRATEGY FOR SUSTAINABILITY

The Total Water Management Strategy (the Strategy) promulgated by WSD in 2008 has mapped out the strategy for sustainable use of water to ensure water security and support development in Hong Kong. The Strategy puts an emphasis on containing the growth of water demand through promoting water conservation and exploiting new water resources. The major initiatives are enhancing public education on water conservation, promoting the use of water-saving products, enhancing water leakage control, extending the use of salt water for toilet flushing, strengthening the protection of existing water resources and actively exploiting new water resources.

為應對目前挑戰及各方面的最新發展，確保供水的可持續性，「策略」的檢討工作已經進入最後階段，其涵蓋的內容包括：確認「策略」的成效；更新了用水需求和供應的預測方法，同時在考慮了氣候變化的因素下，預測至二零四零年的用水需求和供應；制定並評審各供水管理方案，就本港可持續供水策略提供建議；以及更新「策略」。有關檢討和建議的工作，將於二零一九年年底完成。

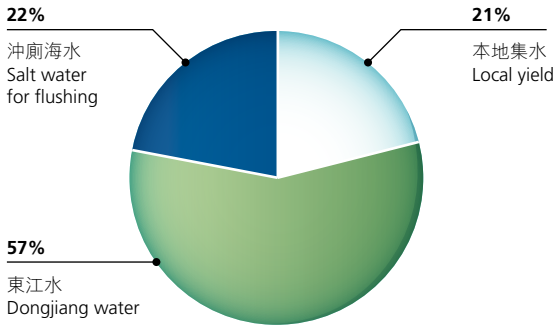
To safeguard the sustainability of water supplies taking account of the contemporary challenges and the latest developments on various fronts, a review on the Strategy has proceeded into the final stage to ascertain its effectiveness; update the forecast methodologies of water demand and supply, and projections up to 2040 taking into account impacts of climate change; formulate and evaluate water management options, and recommend strategies for ensuring the sustainability of water supplies in Hong Kong; and propose updates of the Strategy. The review findings and recommendations will be available in late 2019.

二零一四年至二零一八年全年食水供應量
Annual Quantity of Fresh Water Supply 2014 – 2018

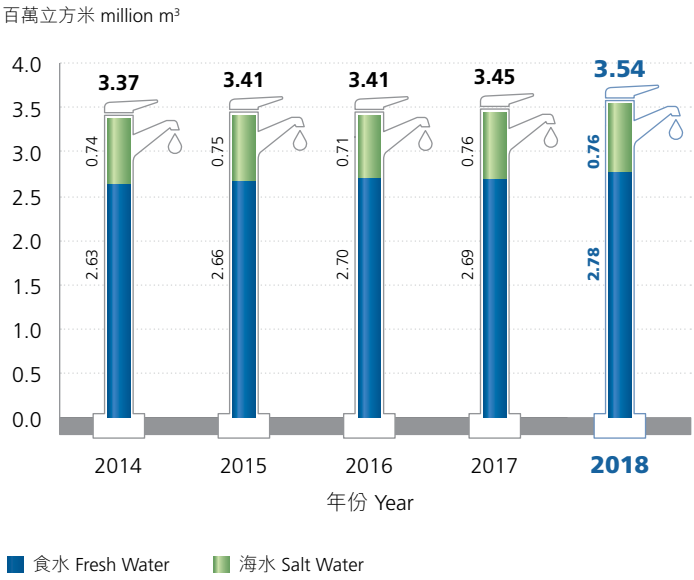


二零一八年總用量(食水及海水)
Total Water Consumption (Fresh Water and Salt Water) in 2018

1,292 百萬立方米 million m³



二零一四年至二零一八年總平均每日用量(食水及海水)
Total Average Daily Water Consumption (Fresh Water and Salt Water) 2014 – 2018



二零一八年按用水類別劃分的食水用量
Annual Fresh Water Consumption by Sector 2018

用水類別 Sector	食水用量 Fresh Water Consumption 百萬立方米及佔總用量百分比 million m³ and percent of total
住宅用水 Domestic	**557 (55.0%)**
工業用水 Industrial	**62 (6.1%)**
服務業及商業用水 Service Trades	**262 (25.9%)**
政府用水 Government Establishments	**46 (4.5%)**
建築及船舶用水 Construction & Shipping	**19 (1.9%)**
臨時淡水沖廁 Flushing	**67 (6.6%)**
食水總用量 Total Fresh Water Consumption	**1,013 (100%)**

有效管理現行水資源

目前，本港供水包括本地集水區收集的雨水、輸入的東江水及沖廁用的海水。

EFFICIENTLY MANAGING EXISTING WATER SOURCES

Currently, Hong Kong's water supplies are composed of yield from local catchments, imported water from Dongjiang, and salt water for flushing.

本地集水

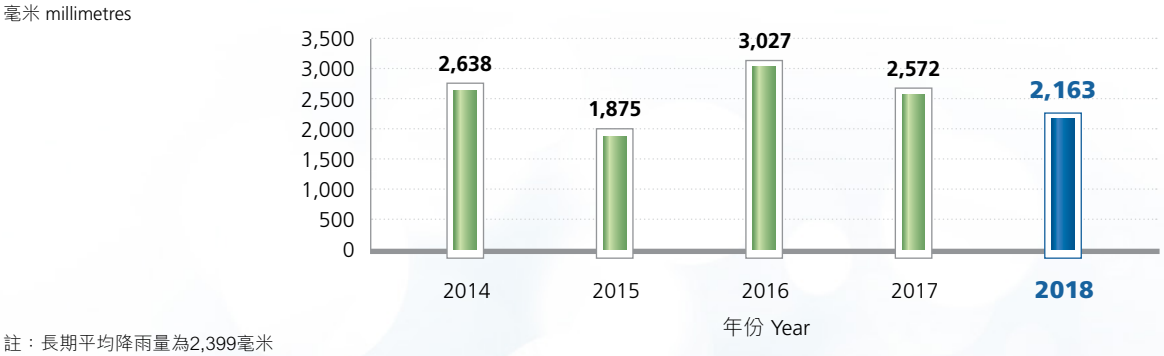
本地集水從集水區收集而來，這些集水區大部分位於受保護免受污染的郊野公園，本署在這些集水區會進行定期巡查及水質監控，以確保水質安全。

Local Yield

The yield is collected in catchment areas which are mostly within Country Parks that are well protected from contamination. WSD conducts regular inspections and water quality monitoring in these catchment areas to ensure water safety.

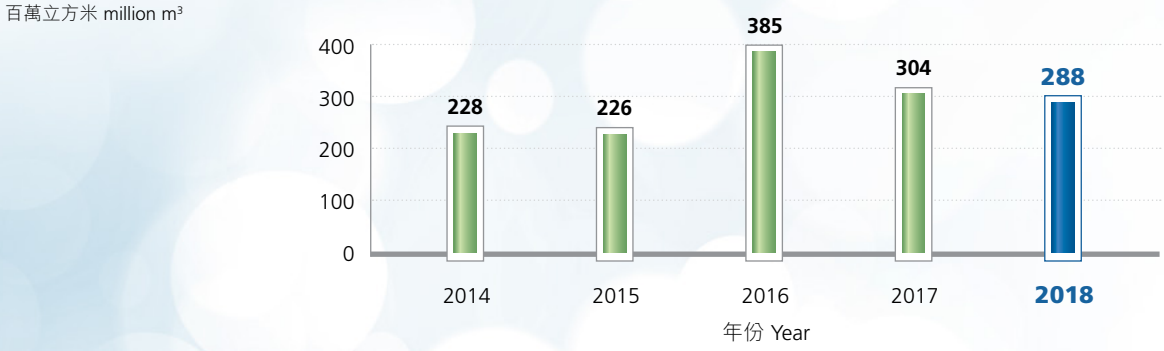
本地集水佔全港
Local yield accounts for Hong Kong's
20% – 30%
的食水供應
of fresh water supply

二零一四年至二零一八年全年降雨量
Annual Rainfall 2014 – 2018



註：長期平均降雨量為2,399毫米
Note : Long-term mean rainfall is 2,399 mm

二零一四年至二零一八年淨集水量
Annual Net Yield 2014 – 2018



東江水

本署輸入東江水以彌補本地集水量的不足，從而應付食水需求。本港每年按實際需要輸入東江水至粵港供水協議訂明的每年供水量上限。當本地集水較為充足時，即會減少該年東江水的輸入量，避免浪費東江水，亦可減省輸水成本。

二零一八至一九年度是粵港兩地就二零一八年至二零二零年簽訂為期三年的供水協議的第二年。在該協議下，東江水價格按年上調0.3%。有關價格調整是按照粵港兩地相關消費物價指數和人民幣兌港幣匯率變動而訂定。東江水的價格在二零一九年為48.07億元，而二零一八年為47.93億元，二零二零年則為48.21億元。

Dongjiang Water

WSD imports Dongjiang water to fill the gap as Hong Kong's local yield is insufficient to meet its water demand. Each year, Hong Kong imports Dongjiang water as needed up to the annual supply ceiling stipulated in the Dongjiang water supply agreement between Guangdong and Hong Kong. When more local yield is available in a particular year, less Dongjiang water is imported. This avoids wasting Dongjiang water resources and saves pumping costs.

In 2018/19, Hong Kong entered its second year of the three-year Dongjiang water supply agreement for 2018 to 2020. Under the agreement, Dongjiang water prices will be increased by 0.3% annually, which was based on the changes of the relevant price indices of Guangdong and Hong Kong and the exchange rate between the Renminbi and the Hong Kong dollar. The price in 2019 was $4,807 million, compared to $4,793 million paid in 2018 and $4,821 million to be paid in 2020.

東江水佔全港
Dongjiang water accounts for
70%–80%
的食水供應
of Hong Kong's fresh water supply

點滴話你知 Do you know?

粵港供水協議自二零零六年起採用「統包總額」方式，根據香港年度的本地集水量供應東江水，確保其供應可靠和具彈性，以切合本港的實際需要，令供水可靠程度達至99%。即是說，縱使百年一遇的旱情出現，本港仍能維持全日供水。

Since 2006, the "package deal lump sum" approach has been adopted in the Dongjiang water supply agreements between Guangdong and Hong Kong to ensure a reliable and flexible supply of Dongjiang water to meet the actual needs of Hong Kong according to the local yield collected in a particular year. This renders 99% reliability, i.e. the water supply in Hong Kong can be maintained round the clock even under extreme drought conditions with a return period of once in 100 years.

沖廁用海水

為節省珍貴的食水資源，本港大部分地區均採用海水沖廁，是世界上少數採用同類措施的地區。在二零一八至一九年度，本署完成了元朗水邊圍邨及屯門三聖邨等大型屋邨由淡水沖廁轉換至海水沖廁，每年可節省約60萬立方米食水。薄扶林及新界西北仍然使用淡水沖廁的地區亦正進行轉換至海水沖廁的工作。

85%
人口覆蓋率
population covered

隨着東涌新市鎮擴展，本署亦計劃於東涌實施海水沖廁。

Flushing with Salt Water

Using salt water for flushing has been widely adopted in Hong Kong to save precious fresh water resources. It is a rather unique practice in the world. In 2018/19, WSD completed converting the flushing supply to salt water for some large housing estates such as the Shui Pin Wai Estate at Yuen Long and Sam Shing Estate at Tuen Mun. This conversion will save about 0.6 million m^3 of fresh water per annum. Similar conversions are underway for buildings in Pok Fu Lam and areas still using fresh water for flushing in the North West New Territories.

Salt water for flushing in the Tung Chung area has also been planned for implementation in conjunction with the Tung Chung New Town extension.

開拓新水源

本署現正計劃開拓不受氣候變化影響的新水源，即海水化淡及循環再用水，以輔助現行供水，提升本港供水安全及應變力。

海水化淡

本署現正就將軍澳海水化淡廠的設計、建造及運作合約招標，化淡廠會在建築設計上盡量避免對環境造成影響，並能與周邊的未來發展和諧協調。另外，將軍澳海水化淡廠將採用先進的逆滲透技術，並會使用再生能源和低耗能水處理過程等。化淡廠的設計及建造工程預計在二零一九年十二月展開。

ADOPTING NEW WATER SOURCES

WSD has planned to supplement the existing water supplies with desalinated water and recycled water, new sources that are not susceptible to climate change, and thus offer enhanced water security and resilience for Hong Kong.

Sea Water Desalination

WSD is currently tendering for the design, construction and operation of a desalination plant in Tseung Kwan O. This plant will feature architectural design to minimise its impact on the environment and make it blend in with future development in the area. Besides, the plant will adopt advanced reverse osmosis technology, renewable energy usage and low-energy consumption processes. Design and construction of the plant is scheduled for commencement in December 2019.

預期成果 Anticipated Results

135,000 立方米 m^3
每日食水產量
water production capacity per day

5%
可應付本港食水用量
To meet fresh water demand

未來可擴展至
Provision for future expansion to

270,000 立方米 m^3
每日食水產量
water production capacity per day

10%
可應付本港食水用量
To meet fresh water demand

再造水

石湖墟污水處理廠現正進行工程，提升為淨水設施，增強處理上水、粉嶺及鄰近地區污水的能力，經淨水設施處理的排放水會用作生產再造水作沖廁及其他非飲用用途。此舉不但可節約食水，亦減少經處理的排放水的排放量。

本署已於二零一七年四月開始動工建造配水庫及敷設輸水幹管，為供應再造水作準備。再造水生產設施、抽水系統及分配水管等餘下的工程亦正在設計階段，它們的建造工程會按時展開。本署預計於二零二二年開始分階段向上水和粉嶺供應再造水作沖廁用途。

Water Reclamation

Shek Wu Hui Sewage Treatment Works is currently being upgraded to an Effluent Polishing Plant (EPP). It will increase its capacity for treating sewage from Sheung Shui, Fanling and adjacent development areas. Reclaimed water is to be produced from the treated effluent of the EPP. Using reclaimed water for flushing and other non-potable uses not only saves fresh water, but also reduces the amount of treated effluent discharge.

In April 2017, WSD also began to construct a service reservoir and lay trunk water mains to prepare for the supply of reclaimed water. The remaining works, including water reclamation facilities, a pumping system and local distribution mains, are now under design, and their construction is expected to begin on time. The supply of reclaimed water for flushing in Sheung Shui and Fanling will launch in phases, starting in 2022.

預期成果 Anticipated Results

上水和粉嶺將於二零二二年開始分階段實施計劃
Supply will launch in phases starting with Sheung Shui and Fanling from 2022 onwards

約 About **500,000**
覆蓋人口
population covered

22,000,000 立方米 m^3
食水每年得以節省
fresh water saved each year

2%
佔本港食水用量
of fresh water consumption in Hong Kong

中水重用及雨水回收

本署將於二零二零年在安達臣道石礦場用地發展項目中，興建一套中央中水重用系統。系統由政府運作將處理在該發展區內收集到的中水，用作沖廁及其他非飲用用途。該系統將包括中水處理廠、抽水系統、貯存經處理中水的配水庫，以及收集中水和向客戶供應經處理中水的管道。該系統預計於二零二三年落成啟用，以配合該區的居民入伙。

Grey Water Recycling and Rainwater Harvesting

In 2020, WSD will begin to construct a centralised grey water recycling plant at the Anderson Road Quarry Site Development. The system will treat grey water collected from the development for flushing and other non-potable uses, and will include a grey water treatment plant, a pumping system, a service reservoir for storing treated grey water, and pipes to collect the grey water and supply treated grey water to customers. The system will be commissioned in 2023 to tie in with the population intake of the development.

預期成果 Anticipated Results

3,300 立方米 m^3

每日處理量

treatment capacity per day

政府在其新項目中積極採用中水重用及雨水回收系統，以提倡廣泛應用相關技術，水務署天水圍大樓便是其中一個設有有關系統的項目。發展局和環境局在關於環保政府樓宇的聯合技術通告已羅列詳細指引，在新建政府項目安裝中水重用及雨水回收設施，以減少非飲用用途的食水用量。

與此同時，本署亦為香港綠色建築議會就「綠建環評既有建築2.0版」的評級檢討提供技術支援，提高私人樓宇使用中水重用及雨水回收系統的額外評級得分，以及在「綠建環評新建建築」的評級檢討提供類似技術支援，以鼓勵發展商提供相關系統，減少使用食水作非飲用用途。

To further promote the wide use of grey water recycling and rainwater harvesting systems, the Government advocates their applications in new Government projects, such as the WSD Tin Shui Wai Building. The Joint Development Bureau and Environment Bureau Technical Circular on Green Government Buildings has laid down detailed guidelines for installing recycling facilities for grey water and harvesting facilities for rainwater in new Government projects to reduce the fresh water demand for non-potable applications.

Moreover, under the Building Environmental Assessment Method (BEAM) Plus for Existing Buildings Version 2.0, WSD has provided technical support to Hong Kong Green Building Council in reviewing the scheme which increased the bonus credit awards to private buildings that include grey water recycling and rainwater harvesting systems. Similar technical support has also been provided to the Council in its review of the BEAM Plus for New Buildings to encourage developers to reduce the use of fresh water for non-potable uses through these systems.

水質
Water Quality

推行全方位措施 保障香港食水水質

A Multi-Dimensional Approach to Safeguarding Hong Kong's Drinking Water Quality

水務署嚴格管理和制訂水安全計劃，全面保障香港食水水質及公眾健康。

WSD protects Hong Kong's drinking water quality and hence public health through comprehensive management and water safety plans.

香港是全球其中一個擁有安全食水供應的城市。
Hong Kong is one of the cities in the world where one can enjoy a safe drinking water supply.

水質標準及監測

東江水

確保水質

廣東省當局一直採取有效措施，確保輸港東江水的水質符合粵港供水協議所訂定的國家《地表水環境質量標準》(GB3838-2002)第II類的標準，亦即適用於作生活飲用水的地表水的最高國家標準。為此，廣東省當局推行了多項有效措施及項目，包括興建新污水處理廠、遷走污染性的工廠和農場、敷設專用輸水管道、建立東江流域水資源水量水質監控系統，以及在深圳水庫運作的生物硝化站等。

WATER QUALITY STANDARDS AND MONITORING

Dongjiang Water

Maintaining Quality

The Guangdong Authorities have taken effective steps to ensure that the quality of Dongjiang water being delivered to Hong Kong meets the national standard for Type II water in the "Environmental Quality Standards for Surface Water" (GB3838-2002) stipulated in the Dongjiang water supply agreement, which is the highest national standard applicable for the surface water abstracted for human consumption. This has been achieved through a combination of measures and projects by the Guangdong Authorities, including construction of new sewage treatment plants, removal of polluting factories and farms, commissioning of dedicated aqueducts, implementation of the Dongjiang Basin Water Quantity and Quality Monitoring and Control System, and the on-going operations of the bio-nitrification plant at the Shenzhen Reservoir.

緩解洪水對沙灣河水質造成的威脅

沙灣河流域水環境綜合整治工程現正如火如荼地進行。鑑於供港東江水經深圳水庫輸往香港，有關工程將可大幅減低沙灣河在暴雨期間排洪入深圳水庫而對東江水水質造成的影響。

24小時東江水水質監測

本署在接收東江水的木湖抽水站設有在線水質監測系統，對接收的東江水水質進行24小時監測。

Mitigating Flood Impact of Shawan River on Water Quality

The Comprehensive Remediation Project for the Water Environment of the Shawan River Basin is in full swing. This project will significantly reduce the impact on Dongjiang water quality due to flood water from Shawan River discharging into the Shenzhen Reservoir where the Dongjiang water is stored and subsequently delivered to Hong Kong, during heavy rainfall.

Round-the-Clock Dongjiang Water Quality Monitoring

At the Muk Wu Pumping Station where Dongjiang water is received, WSD monitors the quality of Dongjiang water received through 24-hour on-line water quality monitoring system.

東江水的平均氨氮及錳水平
Average Ammoniacal Nitrogen and Manganese Levels in Dongjiang Water

	單位 Unit	財政年度 Financial Year			GB3838-2002第II類標準值 Standard in GB3838-2002 (Type II)
		2016/17	2017/18	2018/19	
氨氮 Ammoniacal Nitrogen	毫克/公升 mg/L	0.03	0.04	0.04	≤0.5
錳 Manganese	毫克/公升 mg/L	0.03	0.03	0.03	≤0.1

食水

恪守國際標準

本署致力為客戶提供安全的食水。多年來，本署供應的食水水質均完全符合世界衞生組織制訂的《飲用水水質準則》(世衞準則)及其後於二零一七年訂定的香港食水標準。為保證食水的水質以保障公眾健康，本署按世衞準則制定及實施了食水水質管理系統，當中涵蓋健康目標、本署水安全計劃，以及監測系統等主要部分，作為一個綜合系統管理食水水質。本署正與發展局共同檢討香港食水標準，研究可否為若干參數訂立比世衞準則更嚴謹的標準。

Drinking Water

In Line with International Practices

WSD is committed to providing safe drinking water supply to our customers. Over the years, WSD has been supplying drinking water with quality in full compliance with the World Health Organization's Guidelines for Drinking-water Quality (WHO Guidelines) and the subsequent Hong Kong Drinking Water Standards (HKDWS) established in 2017. To assure the quality of drinking water for the protection of public health, WSD has implemented the Drinking Water Quality Management System (DWQMS), which was prepared with reference to the WHO Guidelines. The DWQMS has incorporated the major components of health-based targets, water safety plan of WSD and surveillance as an integrated system for management of drinking water quality. WSD is also working with Development Bureau in the process of reviewing HKDWS, with a view to assessing the appropriateness of having parameters with standards more stringent than those in the WHO Guidelines.

點滴話你知 Do you know?

香港食水標準是根據專家顧問的報告，於二零一七年制訂。有關報告參考了兩個國際組織(即世衞和歐盟)及七個海外國家(即英國、美國、加拿大、澳洲、新加坡、紐西蘭和日本)在訂立食水標準方面的策略、理據和做法。香港食水標準得到食水安全諮詢委員會[1]認可。

The HKDWS was established in 2017 based on a review of an expert consultant on the approaches, rationales and practices of two international organisations (the WHO and the European Union) and seven overseas countries (i.e. the United Kingdom, the United States of America, Canada, Australia, Singapore, New Zealand and Japan) in establishing their drinking water standards. The HKDWS has been endorsed by the Drinking Water Safety Advisory Committee[1].

水質監測

本署推行水質監測計劃，透過抽取水樣本進行物理、化學、細菌學、生物學和輻射學化驗，監測整個處理、供應及分配過程中的食水水質。抽樣範圍包括濾水廠、配水庫、供水接駁點，以及隨機抽選的公眾可達客戶水龍頭(例如商場、診所、社區設施、運動場、街市、政府辦事處及屋邨管理辦事處等地方的水龍頭)，藉以監測食水水質。

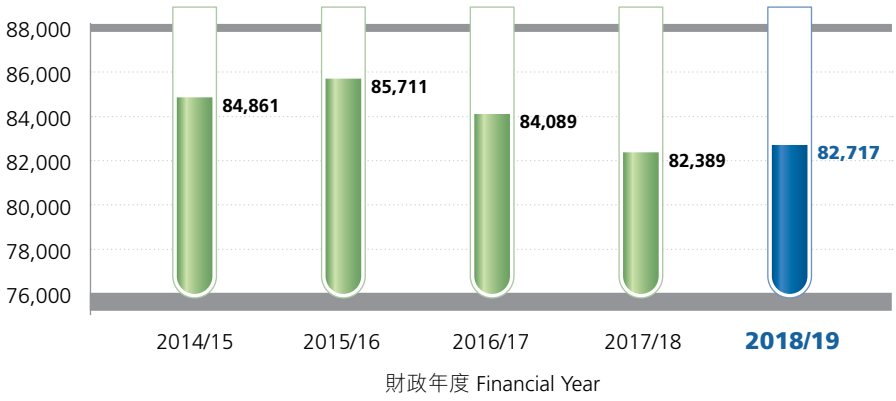
Water Quality Monitoring

Under the water quality monitoring programme implemented by WSD, drinking water quality throughout the entire treatment, supply and distribution system is monitored via physical, chemical, bacteriological, biological, and radiological examinations of water samples. Water samples are collected from water treatment works (WTWs), service reservoirs, connection points and randomly selected publicly accessible customers' taps such as those in shopping centres, clinics, community facilities, sports grounds, markets, government offices and estate management offices to monitor the quality of drinking water.

1 食水安全諮詢委員會於二零一八年一月成立，由學者、醫學專家及其他相關業界持份者所組成，就食水安全事宜向發展局提供意見。
The Drinking Water Safety Advisory Committee was set up in January 2018, comprising academics, medical experts and other stakeholders from related fields, to give advice to Development Bureau on drinking water safety issues.

>80,000

每年抽取及檢測的食水樣本總數
drinking water samples are taken and tested each year



註：以上的食水樣本是從濾水廠、配水庫、供水接駁點及公眾可達的客戶水龍頭抽取。
Note: These drinking water samples were taken at WTWs, service reservoirs, connection points and publicly accessible customers' taps.

為進一步保障本港的食水水質，本署自二零一七年十二月起展開水質監測優化計劃，在隨機抽出處所的客戶水龍頭收集食水樣本，檢測在內部供水系統中可能出現的六種金屬(即鉛、鎳、鉻、鎘、銅和銻)。

To further safeguard the drinking water quality of Hong Kong, WSD began the Enhanced Water Quality Monitoring Programme in December 2017. The programme collects drinking water samples from customers' taps of randomly selected premises. These samples are tested for the content of six metals (i.e. lead, nickel, chromium, cadmium, copper and antimony) that might be present in the internal plumbing system.

檢討水務法例提升食水安全

為進一步提升本港食水安全，本署於本財政年度繼續全面檢討《水務設施條例》(第102章)和《水務設施規例》(第102A章)，擬加強規管內部供水系統的設計、建造和保養，以及水喉物料。本署正諮詢相關持份者以檢討所有負責設計、建造及保養內部供水系統的人士(包括發展商、專業人士、承建商、持牌水喉匠、水喉工人、註冊代理人和客戶)的角色和職責，以及水喉物料的管制。本署舉行了多個工作小組會議以收集這些持份者的意見。有關修例建議預計於二零二零年年中完成，以便展開公眾諮詢。

LEGISLATIVE REVIEW FOR ENHANCING DRINKING WATER SAFETY

To enhance Hong Kong's drinking water safety, WSD continued a holistic review of the Waterworks Ordinance (Cap.102) and Waterworks Regulations (Cap.102A) during this financial year. This review intends to strengthen regulatory control over the design, construction and maintenance of internal plumbing systems as well as plumbing materials. WSD is consulting relevant stakeholders regarding the roles and responsibilities of all persons responsible for the design, construction and maintenance of internal plumbing systems (including developers, professionals, contractors, licensed plumbers, plumbing workers, registered agents and customers); and the control of plumbing materials. Working group meetings have been held to solicit views from these stakeholders. It is expected that the legislative proposals will be finalised by the mid 2020 to facilitate the subsequent public consultation.

水務基建設施
Waterworks Infrastructure

精益求精
不斷提升供水可靠性
Continually Enhancing Water Supply Reliability

水務署持續投資建設本港的水務基建設施，提升供水可靠性。

WSD continually invests in Hong Kong's waterworks infrastructure and enhances the reliability of water supplies.

本署基建項目納入不同綠化設施，圖中顯示的是大埔濾水廠的垂直綠化牆。

Various greening features have been integrated in WSD's infrastructure. The photo shows the vertical green wall in Tai Po WTW.

本署正在進行各項設施建造計劃以提升供水可靠性。正如「供水工作」一章中提及，目前正在推展各項開拓新水源的工程項目，包括1)將軍澳海水化淡廠；2)石湖墟再造水廠；及3)安達臣道石礦場用地發展項目的中水重用設施。新基建設施除了進一步提高供水的可靠性，本署同時亦十分關注土地資源的有效利用。正如「可持續發展及節約用水」一章中提及，本署正在研究將部分水務設施遷往岩洞的可行性，以期騰出本署目前佔用的土地作重新發展，以滿足社會其他更迫切的需要。

WSD is moving forward on various facility construction projects to enhance the reliability of the water supplies in Hong Kong. As mentioned in the chapter "Work in Water Supplies", projects are in progress for development of new water resources, including 1) Tseung Kwan O Desalination Plant; 2) Shek Wu Hui Water Reclamation Plant; and 3) grey water recycling facilities at the Anderson Road Quarry Site Development. Not only the new infrastructure will further enhance the reliability of water supplies, WSD is also cautious on efficient use of land resources. As discussed in the chapter "Sustainability & Conservation", WSD is studying the feasibility of relocating some waterworks facilities into caverns, with a view to releasing the land we are currently occupying for re-development to meet other more pressing needs of society.

濾水廠設施升級

運作可靠性及處理能力

大埔濾水廠的擴建已大致完成，濾水量由每日40萬立方米增加一倍至80萬立方米。本署預計沙田濾水廠(南廠)原地重置工程的前期工程將於二零二零年大致完成，而接續的主項工程的詳細設計亦即將完成，並預計建造工程於二零二零年動工。重置後的南廠預計將於二零二五年全面投入運作，以確保為公眾提供充足的優質食水。

升級消毒設施

本署正為十間主要濾水廠安裝現場氯氣生產設備，提升消毒設施，將可消除運輸和儲存液態氯過程中洩漏氯氣的風險。此項工程項目預計於二零二一年完成。

WATER TREATMENT FACILITY UPGRADES

Operational Reliability and Capacity

The Tai Po WTW expansion has been substantially completed, which has doubled its daily treatment capacity from 400,000m^3 to 800,000m^3. By early 2020, WSD expects to have substantially completed the advance works for the in-situ re-provisioning of the Sha Tin WTW (South Works). The detailed design of the project's subsequent main works will be completed and construction works are targeted for commencement in 2020, with a goal of full commissioning of the re-provisioned plant in 2025. This will ensure an adequate and quality supply of potable water to the public.

Upgrading Disinfection Facilities

WSD is upgrading the disinfection facilities in 10 major WTWs by installing on-site chlorine generation plants. This will eliminate the risk of chlorine leakage associated with the transportation and storage of liquid chlorine. This project is expected to be completed in 2021.

提升本港供水能力

滿足東涌及大埔的食水需求

為滿足東涌新市鎮在二零二零年後增加的食水需求，本署正在興建東涌二號食水配水庫，預計將於二零二零年年底啟用。

另一方面，下黃宜坳食水抽水站提升及其配套食水水管的敷設工程亦即將展開，以應付大埔南新房屋發展的需求。此外，本署亦正在進行上黃宜坳三號食水配水庫的設計工作，以滿足該區未來需求。

應付荃灣及葵涌沖廁用水需求

本署現正進行荃灣海水抽水站升級及其配套海水水管敷設工程的設計工作，以滿足區荃灣及葵涌區內新房屋發展的沖廁用水需求。

延伸沙田海水供應系統

本署目前正在就延伸沖廁海水供應系統至沙田水泉澳進行設計工作。

水務設施管理

本署致力達致世界級的水務設施管理，以優化設施表現，並在整個設施使用周期中盡量降低成本及故障風險。從籌劃、設計、開發、建造、營運、維修、翻新以至棄置，本署均會考慮設施的整個使用周期作出合適決定，令相關設施可應付未來挑戰，確保其可持續性，並提高運作可靠性及效率。本署亦致力在維持服務水平同時，作好故障風險管理，並根據風險分析就各項設施需進行的工作調配資源及定出優次。

本署根據整個使用周期的考慮，評估下列水務設施所需的改善、修復及更換方案：

EXPANDING HONG KONG'S WATER SUPPLY CAPACITY

Meeting Fresh Water Demand in Tung Chung and Tai Po

To meet Tung Chung New Town's increasing fresh water demand beyond 2020, Tung Chung No.2 Fresh Water Service Reservoir is being constructed with the target commissioning in late 2020.

Separately, construction is about to begin to uprate the existing Ha Wong Yi Au Fresh Water Pumping Station and lay associated fresh water mains to meet the imminent needs of new housing developments in Tai Po South. In addition, WSD is working on the design of Sheung Wong Yi Au No. 3 Fresh Water Service Reservoir to meet future needs in the area.

Catering for Flushing Water Demand in Tsuen Wan and Kwai Chung

WSD is currently working on the design to uprate the existing Tsuen Wan Salt Water Pumping Station and lay associated salt water mains to cater for flushing water demand arising from housing developments in the Tsuen Wan and Kwai Chung area.

Extending Salt Water Supply System in Shatin

WSD is currently working on the design to extend the salt water flushing system to Shui Chuen O in Shatin.

WATERWORKS ASSET MANAGEMENT

WSD strives to attain world-class performance in the management of waterworks assets to optimise their performance and to minimise the cost and failure risks of the assets over their life cycles. WSD takes a life cycle approach for the planning, design, development, construction, operation, maintenance, renewal and disposal of assets and makes appropriate decisions to meet future challenges, ensuring sustainability and improving operational reliability and efficiency. WSD also aims to manage risks of failure while maintaining service levels and to allocate resources and priorities for the various works required on the assets according to risk analysis.

WSD has assessed various options for improvement, rehabilitation and replacement based on life cycle approach for the following waterworks assets:

評估及更換機械和電力設備

本署將繼續為濾水廠和抽水站進行狀況評估，以制訂全面計劃更換這些水務設施內的老化機械和電力設備。

Assessing and Replacing Mechanical and Electrical Equipment

WSD will continue to conduct condition assessments for WTWs and pumping stations to formulate a comprehensive replacement programme for aged mechanical and electrical equipment installed in these waterworks assets.

6 個 nos 濾水廠已在二零一八至一九年度進行評估
6 nos Water Treatment Works assessed in 2018/19

24 個 nos 抽水站已在二零一八至一九年度進行評估
24 nos Pumping Stations assessed in 2018/19

更換抽水站內的老化水管

作為一個恆常項目，本署將繼續更換各海水、食水及原水抽水站內的老化水管，以提升抽水站的運作可靠性及效率。

Replacing Aged Pipework in Pumping Stations

WSD will continue to replace aged pipework at all salt water, fresh water and raw water pumping stations as an on-going programme to enhance operational reliability and efficiency in pumping stations.

安裝水閥電動驅動器

本署將繼續為濾水廠內的水閥安裝電動驅動器，提高運作效率。濾水廠將可透過分佈式控制系統遙距監察和控制這些水閥。截至目前，本署已為屯門、荃灣、馬鞍山、北港和小蠔灣濾水廠內的水閥安裝電動驅動器。

Installing Electric Valve Actuators

WSD will continue to install electric actuators for the valves in WTWs to enhance the operational efficiency. The powered valves will be remotely monitored and controlled via the Distributed Control Systems of WTWs. To date, these actuators have been installed for the valves at the WTWs in Tuen Mun, Tsuen Wan, Ma On Shan, Pak Kong and Siu Ho Wan.

主要濾水廠的現代化改造

本署將繼續為濾水廠進行現代化改造工程，提升它們的分佈式控制系統。牛潭尾、馬鞍山、北港、上水、荃灣、油柑頭和屯門的濾水廠的現代化改造工程已完成，而凹頭濾水廠的工程則將於二零一九年十二月完成。

Modernising Major Water Treatment Works (WTWs)

WSD will continue the modernisation works of upgrading Distributed Control Systems in WTWs. The modernisation works at the WTWs in Ngau Tam Mei, Ma On Shan, Pak Kong, Sheung Shui, Tsuen Wan, Yau Kom Tau and Tuen Mun have been completed. The works at Au Tau WTW will be completed in December 2019.

於新辦事處安裝全新區域監控及資料收集系統

本署新界西區辦事處在遷往天水圍後，於新辦事處的控制中心安裝了一套全新的區域監控及資料收集系統。新系統將提供足夠的監控能力，以應付新界西區未來十年的供水系統發展。

A New SCADA System in a New Office

With the relocation of WSD New Territories West (NTW) Regional Office to Tin Shui Wai, a new Regional Supervisory Control and Data Acquisition (SCADA) System has been installed in the Control Centre in the new office. This new Regional SCADA system offers sufficient control and monitoring capacity to cater for the growth of the water supply systems in the NTW region for the next decade.

改善脱水設備

本署已完成上水濾水廠脱水設備的改善工程，其運作可靠性及效率亦相應提高。

Enhancing the Dewatering Facilities

WSD has completed enhancing the dewatering plants at the Sheung Shui WTW and its operational reliability and efficiency have been improved correspondingly.

提升水管資產管理

本署一直致力保養政府水管。隨着「更換及修復水管計劃」完成後，水管爆裂個案由二零零零年約2,500宗，大幅減少至二零一八年約100宗。本署正在優化水管資產管理策略。此優化策略參考國際最新的最佳實務方案，將會採用風險為本的方針，冀在故障風險、服務水平及成本(包括社會成本，例如水管改善工程對交通及市民造成的影響)之間取得最佳平衡。本署將會繼續評估水管的風險，過程中將考慮各項因素，例如使用年期、物料、狀況、故障記錄，以及水管出現故障的後果等，並為被評估為高風險的水管進行改善工程。本署已批出兩份以風險為本的水管改善工程定期合約。

ENHANCING WATER MAIN ASSET MANAGEMENT

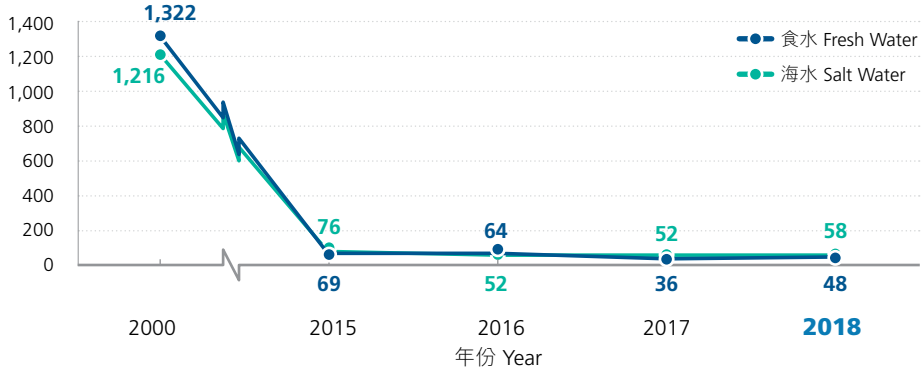
WSD is committed to maintaining the health of the government water mains. Between 2000 and 2018, water main burst cases have reduced significantly from about 2,500 to about 100, largely due to the completion of the Replacement and Rehabilitation of Water Mains Programme. WSD is currently enhancing the strategy for asset management of water mains. Based on the latest international best practices, the enhanced strategy will be risk-based with an aim to striking an optimal balance between the risk of failures, service levels, and costs including social costs, such as the impacts of water mains improvement works on traffic and the public. WSD will continually assess the risk of the water mains, taking into account factors such as their age, material, condition, record of failure, and consequence of failure, and carry out improvement works for those water mains assessed as high risk. WSD has commissioned two term contracts for risk-based improvement works for water mains.

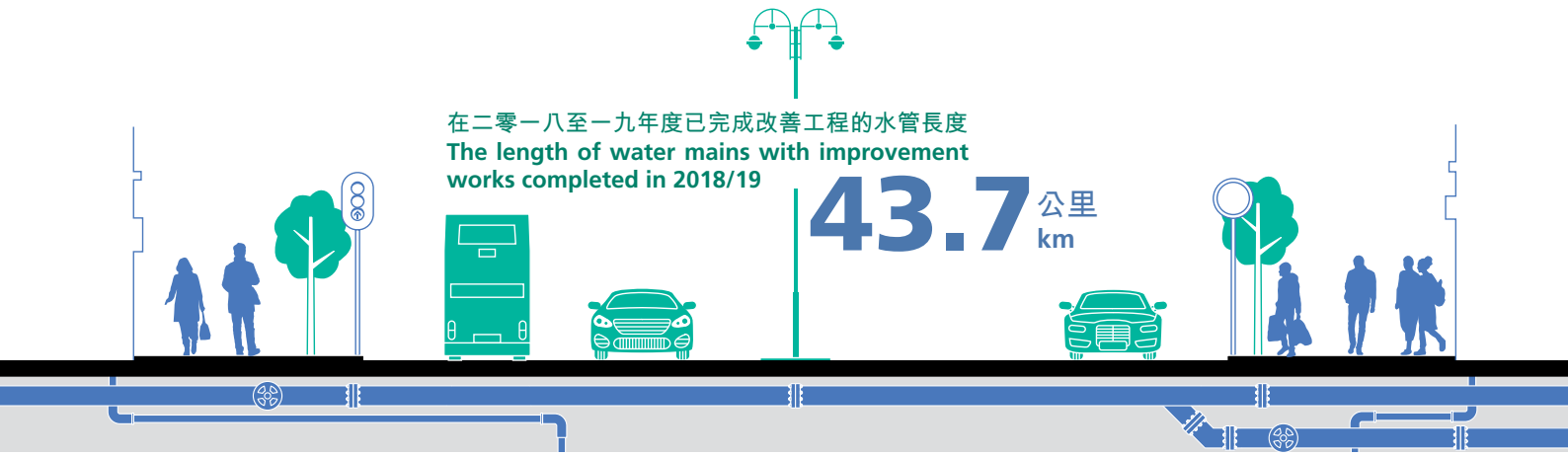
點滴話你知 Do you know?

本署自二零零零年起展開「更換及修復水管計劃」，分階段更換及修復總長度約達3,000公里的老化水管。該計劃於二零一五年大致完成。

WSD launched the Replacement and Rehabilitation Programme of Water Mains in 2000 to replace and rehabilitate about 3,000 km of aged water mains in stages. The Programme was substantially completed in 2015.

水管爆裂個案統計數字
Statistics on Water Main Bursts





在二零一八至一九年度已完成改善工程的水管長度
The length of water mains with improvement works completed in 2018/19

43.7 公里 km

改善及維修斜坡

本署對轄下斜坡進行改善及保養工程，包括打泥釘、斜坡表面加固、在牆腳栽種植物、改善排水系統、提供安全通道走廊、一般栽種植被等，大幅減低了發生山泥傾瀉的風險，以及對公眾、本署員工和設施的威脅。

6,500

水務署負責保養的斜坡總數
Total no. of slopes under maintenance of WSD

UPGRADING AND MAINTENANCE OF SLOPES

WSD carries out upgrading and maintenance works to slopes under its purview such as soil-nailing, slope surface stabilisation, toe planter wall construction, drainage system improvements, safe access corridor creation and general planting, etc. These efforts have led to a dramatic decrease in the risk of failure of the slopes and in the danger they pose to the public, WSD staff and installations.

66

幅斜坡已在二零一八至一九年度進行預防性保養或改善工程
slopes received preventive maintenance or upgrades in 2018/19

視察水塘

本署定期安排員工和外聘專家顧問檢查水塘及配水庫，確保它們安全穩固。

81

由水務署人員在二零一八至一九年度進行的水塘及配水庫的詳細視察
detailed inspections of impounding reservoirs and service reservoirs by WSD staff in 2018/19

INSPECTION OF RESERVOIRS

WSD regularly arranges inspections on impounding reservoirs and service reservoirs by in-house staff and external expert advisors to ensure the safety and stability of the facilities.

43

由外聘專家顧問在二零一八至一九年度進行的水塘及配水庫視察
inspections of impounding reservoirs and service reservoirs by external expert advisors in 2018/19

供水工作大事回顧
Work in Water Supplies Event Highlights

分享水務署最新工作進展
Disseminating information on WSD's Work and Progress

本署不時舉行各式各樣的活動，務求加強與客戶、不同持分者及公眾的聯繫溝通，並分享本署的最新資訊。

WSD hosts numerous events to share news and facilitate communications with customers, different stakeholders and the general public.

馬鞍山濾水廠開放日2018
Ma On Shan WTW Open Day 2018

約 about **1,200**
名參觀人士
visitors

2018 April 四月

馬鞍山濾水廠開放日2018

為讓市民認識濾水廠處理食水的過程和相關技術，水務署於二零一八年四月二十一日舉行馬鞍山濾水廠開放日，為參觀人士提供導賞團及展覽，介紹本署最新的發展項目。參與的學生、區議員及公眾對活動的反應非常正面。

Ma On Shan WTW Open Day 2018

To introduce the water treatment process and its associated technologies to the public, WSD hosted the Ma On Shan WTW Open Day on 21st April 2018. Visitors enjoyed a guided tour and an exhibition showcasing WSD's new projects. The event received overwhelmingly positive feedback from students, district council members and the general public.

西貢區議會到訪馬鞍山濾水廠

西貢區議會主席吳仕福連同多位西貢區議會議員應本署邀請，於二零一八年十月十二日參觀馬鞍山濾水廠，了解其食水處理過程、水質監控程序及西貢區的供水情況。

Sai Kung District Council's Visit to Ma On Shan WTW

WSD invited the Sai Kung District Council (SKDC) to visit the Ma On Shan WTW on 12th October 2018. SKDC Chairman Mr. NG Sze-fuk led a group of SKDC members to learn more about the water treatment process, water quality monitoring procedures and water supply situation in the Sai Kung District.

2018 October 十月

2018 November 十一月

創新科技嘉年華2018

本署於二零一八年十一月三日至十一日參與了此項由創新及科技局舉辦的活動，介紹「智慧資產管理」先導系統。此系統將抽水站的建築資訊模型與資產管理系統整合，為整個系統注入「智慧」元素，自動擷取水泵的實時數據，輔助和協調各方進行水泵維修保養工作。

InnoCarnival 2018

At this event organised by the Innovation & Technology Commission from 3rd to 11th November 2018, WSD introduced its pilot system "Smart Asset Management", which integrates the pumping stations' Building Information Model with an asset management system. By adding the "smart" element to the system, real-time data of water pumps can be retrieved automatically to facilitate and coordinate maintenance decisions among various parties.

水務諮詢委員會參觀東江供水設施

水務諮詢委員會(水諮會)成員在二零一八年十一月二十七日至二十九日到訪廣東，檢視東江水質及供水系統設施，並了解廣東省當局在維護東江水水質工作上的最新發展及措施。

Advisory Committee on Water Supplies' Visit to Dongjiang Water Supply Facilities

From 27th to 29th November 2018, members of The Advisory Committee on Water Supplies (ACWS) visited the Dongjiang Water Supply System to inspect the Dongjiang water and the facilities of the system, and learned about the latest developments and measures adopted in safeguarding the quality of Dongjiang water by the Guangdong Authorities.

點滴話你知 Do you know?

政府成立了水諮會，它是一個獨立組織，負責就供水事宜向政府提供意見，其成員包括公眾、學者、區議員、環保人士、專業人士、業界人士及有關政府決策局和部門的官員。每年水諮會都會考察東江供水系統，檢視東江水質及供水系統設施，並了解廣東省當局在維護東江水水質工作上的最新發展及措施。

The Government set up ACWS. It is an independent body that advises the Government on water supply matters, comprising members from the public, academics, district council members, green advocates, professionals, trades and officials from related Government bureau and departments. Each year, they visit the Dongjiang water supply system to inspect the Dongjiang water quality and the facilities of the system, as well as learn about the latest developments and measures adopted in safeguarding the quality of Dongjiang water by the Guangdong Authorities.

東區區議會參觀大潭水務文物徑

2018 December 十二月

東區區議會議員於二零一八年十二月十四日參觀大潭水務文物徑和大潭水塘群，在認識香港島的供水歷史同時，表達對本署歷史建築物的濃厚興趣。隨後，議員與本署就東區進行的供水情況交換意見。

Eastern District Council's Visit to the Tai Tam Waterworks Heritage Trail

On 14th December 2018, members of the Eastern District Council visited the Tai Tam Waterworks Heritage Trail and the Tai Tam Group of Reservoirs to learn about Hong Kong Islands' water supply history and expressed great interest in WSD's heritage buildings. An exchange of views followed on the water supply situation in the Eastern District.

提升及維修項目

本署透過下列項目，持續擴建及升級基建設施及設備。

Enhancement and Maintenance Projects

WSD is continuing to expand and upgrade its infrastructures and facilities through the different projects listed below.

上水及粉嶺新房屋發展供水計劃 — 塘坑三號食水配水庫建造工程及敷設相關水管工程
Water Supply to New Housing Developments in Sheung Shui and Fanling – Construction of Tong Hang No.3 Fresh Water Service Reservoir and Associated Mainlaying

合約編號 Contract no.	**3/WSD/18**
合約價值 Contract value	**3.485億元 $348.50 million**
承建商 Contractor	**卓裕工程有限公司 U-Tech Engineering Company Limited**
簽署日期 Signing date	**二零一八年十月三日 3rd October 2018**

上環海水抽水站高電壓設備更換工程
Replacement of high voltage equipment at Sheung Wan Salt Water Pumping Station

合約編號 Contract no.	**10/WSD/18**
合約價值 Contract value	**592萬元 $5.92 million**
承建商 Contractor	**金城工程有限公司 Kum Shing Engineering Co. Ltd.**
簽署日期 Signing date	**二零一八年十月十一日 11th October 2018**

二零一六至二零一七年度水務署斜坡預防性維修、改善及相關的勘探工程
Preventive Maintenance Works, Upgrading Works and Associated Ground Investigation for WSD Slopes, 2016-2017 Programme

合約編號 Contract no.	**12/WSD/17**
合約價值 Contract value	**2.09億元 $209.00 million**
承建商 Contractor	**土力資源有限公司 Geotech Engineering Limited**
簽署日期 Signing date	**二零一八年十月十九日 19th October 2018**

智管網水壓管理及區域監測裝置建造工程
Construction of Pressure Management and District Metering Installations under Water Intelligent Network

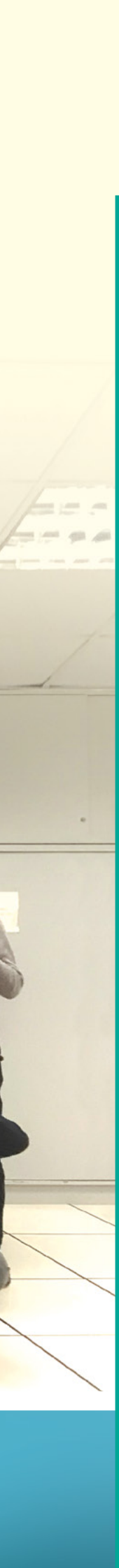
合約編號 Contract no.	**2/WSD/18**
合約價值 Contract value	**3.469億元 $346.90 million**
承建商 Contractor	**中國地質工程集團及協力建業有限公司 China-Geo-Engineering Corporation and Concentric Construction Limited**
簽署日期 Signing date	**二零一八年十一月八日 8st November 2018**

上水及粉嶺新房屋發展供水計劃 — 改善大埔食水抽水站及相關工程
Water Supply to New Housing Developments in Sheung Shui and Fanling – Upgrading of Tai Po Fresh Water Pumping Station and Associated Works

合約編號 Contract no.	**4/WSD/18**
合約價值 Contract value	**4,888萬元 $48.88 million**
承建商 Contractor	**安樂工程有限公司 ATAL Engineering Limited**
簽署日期 Signing date	**二零一九年三月十八日 18th March 2019**

可持續發展及節約用水

Sustainability & Conservation



點滴天然資源　珍惜善用
Stewarding Mother Nature's Precious Resources

“只要大家同心攜手，
積極將資源保育的理念薪火相傳，
必定能一起邁向
可持續發展的未來。

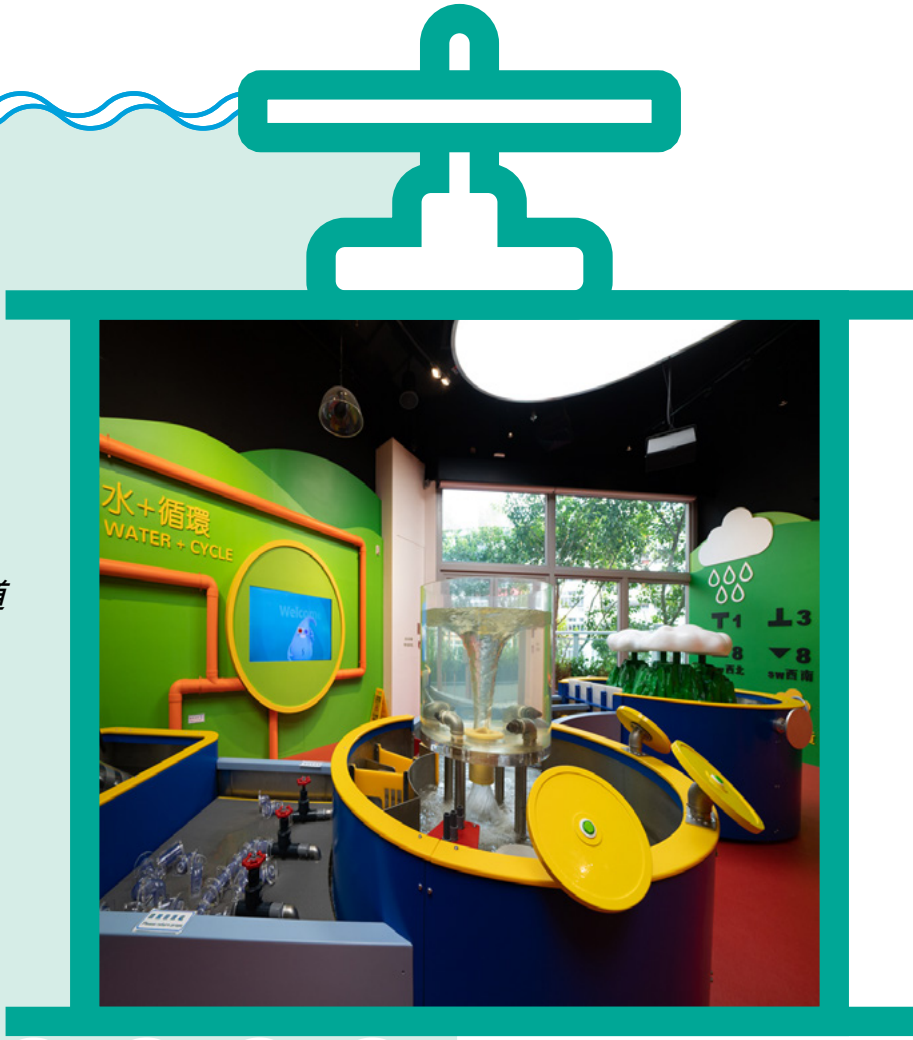
By working together
and inspiring future generations on
resource conservation,
a sustainable future
is within reach.”

節約用水
Water Conservation

推廣珍惜用水 提升節約意識
Engaging and Enhancing Water Conservation

水務署一直多管齊下，透過不同渠道宣傳節約用水。

WSD has adopted a multi-pronged approach in promoting water conservation, using all-round measures.



▲ *全新的水資源教育中心—「水知園」*
The new Water Resources Education Centre - H_2OPE Centre

提倡節約用水

用水效益標籤計劃

本署自二零零九年推出屬自願參與的用水效益標籤計劃，旨在鼓勵客戶使用節水產品。截至二零一九年三月，該計劃已涵蓋沐浴花灑、水龍頭、洗衣機、小便器用具、節流器和水廁。

MAKING WATER CONSERVATION COUNT

Water Efficiency Labelling Scheme

Launched in 2009, WSD's voluntary Water Efficiency Labelling Scheme (WELS) encourages customers to use water-saving products. As of March 2019, WELS has covered showers for bathing, water taps, washing machines, urinal equipment, flow controllers and water closets.

強制用水效益標籤計劃則分階段實施，自二零一八年二月一日起，所有住宅處所的廚房和所有處所的浴室和洗手間的水管工程，均須採用符合其相關用水效益級別的節水產品，藉此推廣用水效益標籤計劃註冊產品，使其普及化。本署正研究透過修改法例，將用水效益標籤計劃由自願參與轉為全面強制參與，要求在零售市場售賣的指定類別的用水產品必須具有用水效益標籤，以便消費者選購節水產品。

WSD is implementing its mandatory WELS in stages. Since 1 February 2018, the mandatory use of WELS products of prescribed water efficiency has been required in kitchens (domestic premises), bathrooms and toilets (all premises) for all plumbing works. The measures will promote wider use of WELS products. WSD is exploring legislative amendment to migrate WELS from voluntary participation to mandatory implementation so that prescribed types of water-using products for sale in the retail market would be affixed with WELS labels to facilitate consumer purchases of water-efficient products.

最佳實務指引

本署與各政府設施的營運機構合作制訂最佳實務指引，提升用水效益。該等設施包括泳池、公園、街市、洗手間、垃圾收集站和懲教院所。同樣地，本署亦與酒店及餐飲業的協會合作，為業界編寫及推出用水最佳實務指引。這工作讓客戶共同為節約用水出一分力。

Best Practice Guidelines

WSD works with facility operators of Government swimming pools, parks, markets, toilets, refuse collection points and correctional institutions to develop Best Practice Guidelines (BPG) measures in order to enhance water use efficiency. Similarly, WSD has worked with related associations to compile and promulgate water usage BPG for hotel and catering sectors. These efforts allow customers to play their part in water conservation.

點滴話你知 Do you know?

最佳實務指引以實際運作為基礎，制訂平衡的節約用水措施，務求在無損整體服務水平的情況下，於日常運作之中實踐。

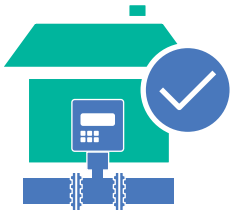
Prepared by fact-based methods, BPG formulates balanced water-saving measures for implementation in day-to-day operations without compromising the overall level of service.

在公共租住屋邨安裝節流器

本署會繼續為公共租住屋邨安裝節流器，以減少耗水量。

Public Rental Housing Estate Flow Controllers

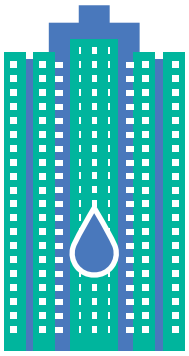
Flow controllers are continually to be installed in public rental housing estates to reduce water consumption.



153,000

戶已安裝節流器

households have flow controllers installed



118

個公共租住屋邨已進行安裝

public rental housing estates covered

提高公眾節水意識

齊來慳水十公升運動

齊來慳水十公升運動鼓勵市民作出節約用水的承諾，並向參與住戶免費派發節流器，得到不少行業、界別和住戶支持。

RAISING WATER CONSERVATION AWARENESS

Let's Save 10 Litres Water Campaign

The Let's Save 10 Litres Water Campaign encourages the public to pledge to save water, and distributes complimentary flow controllers to participating households. Various trades, sectors and households have supported the Campaign.

>140,000

住戶參與

participating households

惜水學堂節約用水教育計劃

此計劃旨在透過結合理論與實踐，加深學生對水資源的認識，及提高他們對節約用水及水資源可持續性的意識。是項計劃在二零一五至一六年度成功在小學推出，幼稚園的先導計劃則在二零一七至一八年度推行，並在本學年度正式全面落實。為進一步迎合教學所需，本署現正優化惜水學堂的小學教材套，並將於二零一九至二零學年在全港的小學推出。

Cherish Water Campus Integrated Education Programme

This programme broadens students' knowledge about water resources and raises their awareness of water conservation and water sustainability by integrating theory with practice. It was successfully rolled out in primary schools in 2015/16, with a pilot kindergarten programme launched in 2017/18 and officially going into full swing in this school year. The teaching kit for primary schools is now being revamped to better meet teaching needs, and is expected to be launched in all primary schools in Hong Kong in the 2019/20 school year.

將近 Nearly **300**

間小學參與
primary schools participated

140

間幼稚園參與
kindergartens participated

水資源教育中心

本署正於天水圍大樓籌辦全新的水資源教育中心—「水知園」，向公眾推廣水資源及節約用水的資訊。該中心展覽面積達720平方米，展覽內容包括水資源和節約用水等深入的資訊，適合學生與不同年齡人士參觀。

Water Resources Education Centre

WSD is establishing a new Water Resources Education Centre – H_2OPE Centre at our Tin Shui Wai Building to enhance the public's knowledge about water resources and water conservation. The centre will feature an exhibition area of 720m² that displays in-depth information on various aspects of water resources and water conservation, suitable for students and visitors of all ages.

點滴話你知 Do you know?

早在二零一二年，本署已在旺角辦事處設立臨時水資源教育中心。截至二零一八年三月辦事處關閉並遷往天水圍為止，該教育中心已接待超過66,000名主要來自小學及非牟利機構的訪客。

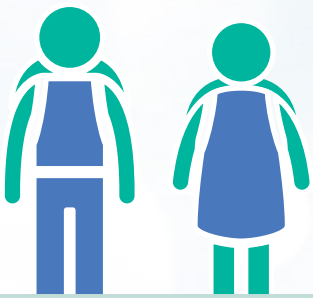
As early as 2012, WSD launched a temporary Water Resources Education Centre at the Mong Kok Office. It received more than 66,000 visitors, mainly from primary schools and non-profit organisations, until its closure in March 2018 when the Mong Kok Office was relocated to Tin Shui Wai.

惜水大使計劃

本署與香港青年協會M21媒體空間於二零一八至一九年度合辦首屆惜水大使計劃，招募中學生及大專生成為惜水大使。這些大使參與了一連串豐富的活動，包括濾水廠導賞團、與主講嘉賓及導演交流會、短片製作工作坊及訓練營等。他們會推廣珍惜和節約用水的重要訊息，為本港建立惜水文化。

Cherish Water Ambassador Scheme

The Hong Kong Federation of Youth Groups Jockey Club Media 21 (M21) joined WSD to present the first-ever Cherish Water Ambassador Scheme in 2018/19, recruiting students from secondary schools and tertiary institutions as Cherish Water Ambassadors. The ambassadors participated in a rich array of events, including a Guided Tour to the water treatment works (WTWs), sharing sessions with guest speakers and film directors, a short film production workshop and a training camp. They will promote important messages about cherishing and saving water, and contribute in establishing a culture of water conservation in Hong Kong.



250

名中學生及大專生參與

students from secondary schools and tertiary institutions recruited

公開講座和展覽

本署不時派員在各種公眾活動宣傳節約用水。在本財政年度，本署派員在香港綠建商舖聯盟大獎典禮上以用水效益最佳實務指引為題發表演講。是次典禮由香港綠色建築議會主辦，目的是表揚購物商場和商舖在保護環境方面的成就。參加者分享各個案例，並就行業制定最佳實務指引交流意見。

Public Lectures and Exhibitions

From time to time, WSD staff promote water conservation at public events. This financial year, we spoke about BPG for Water Usage at the ceremony of Hong Kong Green Shop Alliance Awards. Organised by the Hong Kong Green Building Council, this event commended the achievements of shopping malls and shops in the aspect of environmental protection. By sharing various cases, participants exchanged ideas on developing best practices for their industries.

防止非法取水

本署負責執行《水務設施條例》(第102章)及《水務設施規例》(第102A章),並對違法人士採取相應法律行動。為防止非法取水,本署向政府職員及公眾宣傳有關訊息,包括透過濾水廠開放日、研討會、學校探訪、水費單上的告示,以及在政府物業、私人物業與客戶諮詢中心的宣傳板張貼海報。

PREVENTING ILLEGAL TAKING OF WATER

WSD is responsible for enforcing the Waterworks Ordinance (Cap. 120) and Waterworks Regulations (Cap.102A) including taking legal action against offenders. To prevent the illegal taking of water, WSD promote relevant messages to the Government officials and the public through WTW open days, seminars, school tours, and notices on water bills, as well as posters on promotion boards displayed at Government premises, private properties and customer enquiry centres.

127 宗 cases

宗成功檢控非法取水個案(二零一八至一九年度)
of successful prosecution of illegal taking of water (in 2018/19)

用水流失管理措施

本署現正逐步建立「智管網」,在水管安裝感應和監測設備以設立監測區域[1]。本署計劃在全港食水分配管網設立約2,400個監測區域。截至二零一九年三月,約1,300個監測區域已經設立。持續監測每個監測區域的水流和水壓,有助制訂有效的措施以處理區域內的食水流失。有關措施包括(一)主動探測及控制滲漏;(二)水壓管理;(三)高效快速地維修滲漏水管;以及(四)重置不符合維修成本效益的水管。本署將採用「智能管網管理電腦系統」,以分析從監測區域的感應和監測設備所收集到的龐大數據,以決定處理有食水流失問題的監測區域的優先次序,採取有效的用水流失管理措施。為加強水管測漏的能力,本署繼續研究各種先進技術的可行性,並為員工提供所需培訓。本署亦將部分測漏工作外判予專門承建商。

WATER LOSS MANAGEMENT INITIATIVES

WSD is progressively establishing a Water Intelligent Network (WIN) by installing sensing and monitoring equipment in the water mains for setting up District Metering Areas (DMAs)[1]. WSD is planning to establish about 2,400 DMAs within the fresh water distribution networks in the territory. As of March 2019, about 1,300 DMAs have been established. Continuously monitoring the water flow and pressure conditions of these DMAs will help determine effective actions for tackling water loss in them including (i) active leakage detection and control; (ii) water pressure management; (iii) quality and speedy repair of water main leaks; and (iv) re-provisioning of water mains beyond economical repair. WSD will use Intelligent Network Management System (INMS) to analyse the vast amount of data collected through the sensing and monitoring equipment of DMAs and prioritise the DMAs with water loss problem for taking effective water loss management actions. To enhance the water main leak detection capabilities, WSD continues to explore the feasibility of applying various advanced technologies and provide necessary training to the staff. WSD has also engaged specialist contractors to carry out leak detection work.

1 監測區域是指分配管網內一個可藉關閉區域邊界閘掣或截斷水管而形成的獨立區域,而供應到該區域的水量和水壓會分別被量度和監測。
A DMA is defined as a discrete area of a water distribution network established by the closure of district boundary valve(s) or disconnection of water mains, with the quantity of water supplied to the area metered and the supply pressure monitored.

延伸海水供應系統

為節約食水，本署正在薄扶林及新界西北進行由淡水沖廁轉換至海水沖廁的工作。新界西北第一期轉換工作已於二零一八年第一季大致完成，涵蓋了天水圍、元朗工業邨、東頭工業區，以及約20個位於元朗及藍地的住宅屋苑。第二期工作已於二零一九年展開，範圍包括元朗市中心、洪水橋及屯門東。此外，東涌新海水供應系統的建造項目亦即將展開，預計於二零二三年完成。

EXTENDING THE SALT WATER SUPPLY SYSTEM

To save fresh water, WSD has been converting flushing supply from fresh water to salt water in Pok Fu Lam and North West New Territories (NWNT). Phase 1 of the conversion in NWNT was substantially completed in the first quarter of 2018, covering Tin Shui Wai, Yuen Long Industrial Estate, Tung Tau Industrial Estate and about 20 housing estates in Yuen Long and Lam Tei. Phase 2 of the conversion was launched in 2019, covering Yuen Long town centre, Hung Shui Kiu and Tuen Mun East. In addition, construction of a new salt water supply system in Tung Chung is about to start, expected to be completed in 2023.

可持續運作
Sustainable Operations

開拓創新方案 貫徹節水理念
A Dedicated and Innovative Approach to Conservation

水務署在提供優質供水服務同時，全力推行能源管理計劃及可再生能源措施，為守護環境作出貢獻。

WSD protects the environment through dedicated effort in implementing energy management programmes and renewable energy initiatives whilst providing high-quality water supply services.

▲ *船灣淡水湖的浮動太陽能板*
Floating Photovoltaic (PV) System at Plover Cove Reservoir

為實踐可持續發展，本署承諾：

- 嚴格遵守一切環保規例
- 善用能源和燃料，開發可再生能源
- 減少並限制水務設施產生的污染和廢物，包括氣體排放、噪音污染，以及固體、液體和化學廢物
- 盡量減少在處理食水過程中使用的化學品
- 盡量減少供水系統的用水流失
- 盡量減少建築工程對環境造成的影響
- 提倡安裝綠化屋頂
- 盡量減少消耗辦公室用品，並提倡使用再造紙

WSD's commitment on sustainability comprises:

- Strictly complying with all environmental regulations
- Optimising energy use and fuel consumption whilst developing renewable energy resources
- Reducing and limiting pollution and waste in our facilities, including gaseous emissions, noise pollution, and solid, liquid and chemical wastes
- Minimising the use of chemicals in the water treatment process
- Minimising water loss across the water supply system
- Minimising the environmental impacts of construction projects
- Encouraging the setting up of green roofs
- Minimising the consumption of glossary items in offices and encouraging the use of recycled paper

節約能源及開發替代能源

新版ISO 50001認證

新版本的ISO 50001能源管理系統認證已於二零一八年年底推出，本署目前正提升其ISO 50001認證至新版本，並預計於二零二零年完成有關過渡工作。此認證涵蓋整個供水鏈，包括收集、儲存、輸送和處理原水，以及供應和分配食水和海水。

ENERGY CONSERVATION AND ALTERNATIVE POWER

Updated ISO 50001 Certification

A new version for ISO 50001 Energy Management System Certification was released in late 2018. WSD is currently upgrading its ISO 50001 certification to the latest version. This transition is targeted to be completed in 2020. This certification covers the entire water supply chain, from collection, storage, transfer and treatment of raw water to the supply and distribution of fresh water and salt water.

點滴話你知 Do you know?

在二零一四年，本署成為香港特區首個獲得ISO 50001:2011能源管理系統認證的政府部門。

In 2014, WSD became the first HKSAR Government department to obtain ISO 50001:2011 Energy Management System certification.

減少碳足印

本署已完成龍翔道機電工場、長沙灣大樓、九龍灣大樓、天水圍大樓和北角大樓的碳審計工作，並會將所得數據用於為這些場所制訂減碳措施，以減少溫室氣體排放。

Carbon Footprint Reduction

WSD has completed a carbon audit in Lung Cheung Road Mechanical and Electrical Workshop, Cheung Sha Wan Building, Kowloon Bay Building, Tin Shui Wai Building, and North Point Building. The data collected will be used to determine appropriate carbon reduction measures for reducing greenhouse gas emissions in these premises.

水力發電站

繼位於屯門濾水廠的全港首個水力發電站啓用後，本署現正在沙田濾水廠興建另一所水力發電站，預計於二零一九年年底啟用。這些水力發電站將進入濾水廠的原水的位能轉化為電能，供濾水廠使用。此外，位於馬鞍山濾水廠的水力發電設施的設計工作亦即將完成，預計於二零二二年竣工。

Hydropower Generation Plants

Following the commissioning of Hong Kong's first hydropower plant at Tuen Mun WTW, WSD is constructing another hydropower plant at its Sha Tin WTW. The hydropower plant at Sha Tin WTW is scheduled for commissioning in late 2019. These plants convert the potential energy of inflowing raw water to the WTWs into electrical power for use in the WTWs. The design of the hydropower plant at Ma On Shan WTW will shortly be completed, with the plant targeted to complete in 2022.

▲ *屯門濾水廠的水力發電站*
Hydropower Plant in Tuen Mun WTW

▲ *內聯閉式水力發電裝置*
In-line Hydropower Harness Device

內聯閉式水力發電裝置

內聯閉式水力發電裝置將安裝於「智管網」內部分將會設立的監測區域，為感應和監測設備及數據傳輸裝置提供電力。在創新及科技局設立的科技統籌(整體撥款)資助下，本署將購入20台內聯閉式水力發電裝置。兩套適用於較大的250毫米直徑水管的內聯閉式水力發電裝置原型，早前已於東九龍區的「智管網」監測區域內通過嚴格操作測試。

In-line Hydropower Harnessing Devices

In-line hydropower harnessing devices (IHHD) will be installed in some of the DMAs to be established under the WIN to power the sensing and monitoring equipment and data transmission device. Procurement of 20 sets of IHHD will be funded under the Innovation and Technology Bureau's TechConnect Block Vote. Two prototypes of IHHD suitable for use in the larger 250mm diameter pipes have already passed vigorous running tests in DMAs in the East Kowloon Region.

變速抽水水泵

本署現正在小西灣海水抽水站安裝變速抽水泵，以改善抽水效率，相關工程預計於二零二零年年底完成。而就在東涌海水抽水站和堅尼地城海水抽水站採用同類型水泵的可行性研究亦正在進行，以評估成效。

浮動太陽能板發電系統

繼石壁水塘和船灣淡水湖的先導項目取得成功後，本署現正計劃於大欖涌水塘安裝一組100千瓦的浮動太陽能板發電系統，進一步發展再生能源。此外，本署亦正研究在船灣淡水湖安裝大型浮動太陽能發電場的可行性。

Floating Photovoltaic Systems

Following the success of pilot projects at the Shek Pik Reservoir and Plover Cove Reservoir, WSD is preparing to install a 100kW-capacity floating photovoltaic (PV) system at Tai Lam Chung Reservoir to further its efforts in developing renewable energy. In addition, WSD is studying the feasibility of implementing a large-scale floating solar farm at Plover Cove Reservoir.

>30

個水務工程項目已採用建築信息模擬技術

Waterworks projects have adopted BIM

Variable Speed Pumps

To improve pumping efficiency, WSD is installing variable speed pumps at Siu Sai Wan Salt Water Pumping Station, with completion expected in late 2020. Feasibility studies for the effectiveness of adopting similar pumps at Tung Chung Salt Water Pumping Station and Kennedy Town Salt Water Pumping Station are in progress.

▲ *石壁水塘的浮動太陽板*
Floating PV System at Shek Pik Reservoir

嶄新技術和設備

建築信息模擬技術

本署將採用建築信息模擬(BIM)技術以全面管理有關水務工程項目的資訊，包括從規劃、設計，以至建造、運作及維修。本署制訂了BIM應用路線圖，並為員工提供培訓以提高BIM的知識。本署正計劃將BIM的應用擴展至資產管理，以及接受以BIM提交的水管工程申請。

NEW TECHNOLOGY AND EQUIPMENT

Building Information Modelling

WSD adopts Building Information Modelling (BIM) technology to holistically manage information relating to waterworks projects, from planning and design stages to construction, operation and maintenance. A BIM Adoption Roadmap has been formulated, and trainings have been provided to enhance BIM knowledge of the staff. Plans are also underway to extend the use of BIM as an asset management tool and accepting plumbing submission in BIM format.

自動讀錶系統

所有合適的新私人發展項目的批地條款，以及所有合適的新公營和政府發展項目，均已訂明須要採用自動讀錶系統。自動讀錶系統不單節省人力資源與提升讀錶準確度，更可為客戶提供適時的用水數據和其他有用資訊，從而加強他們節約用水的意識。

Automatic Meter Reading System

Requirements for implementation of Automatic Meter Reading (AMR) have been incorporated in the lease conditions of all appropriate new private developments and in all appropriate new public and Government developments. AMR will not only save manpower and improve accuracy in water meter readings, it will also raise customers' awareness of water conservation by timely provision of water consumption data and other useful information to the customers.

土地資源的可持續使用

提高分區辦事處運作效率

本署於二零一八年將新界西分區辦事處遷往天水圍，有助提高新界西分區水務設施的的運作和維修保養工作效率。原有旺角辦事處用地已騰出作其他更適合的發展用途。

SUSTAINABLE USE OF LAND RESOURCES

Optimising Regional Office Efficiency

WSD relocated the New Territories West (NTW) Regional Office to Tin Shiu Wai in 2018. The relocation helps enhance operational and maintenance efficiency of waterworks facilities in the NTW Region. The vacated office site at Mong Kok has been released for other more beneficial developments.

水務設施遷往岩洞工程

本署於二零一八年十二月展開鑽石山食水和海水配水庫遷往岩洞的勘查研究及設計階段。藍地及鄰近地區的現有及擬建配水庫遷往岩洞的可行性研究亦已於二零一九年七月展開，油塘食水及海水配水庫群以及荃灣二號食水配水庫的同類研究則已於二零一七年展開。除此以外，本署亦正與相關部門合作研究，物色其他適合遷往岩洞的水務設施。

Relocation of Waterworks into Caverns

In December 2018, WSD began the investigation and design stage for relocating Diamond Hill Fresh Water and Salt Water Service Reservoirs into caverns. A feasibility study on relocating the existing and proposed service reservoirs in Lam Tei and adjoining areas into caverns has commenced in July 2019, while similar studies on relocating Yau Tong Group Fresh Water and Salt Water Service Reservoirs and Tsuen Wan No. 2 Fresh Water Service Reservoir into caverns have commenced in 2017. In addition, WSD is working with relevant departments to identify other potential installations that may be suitable to be relocated into caverns.

點滴話你知 Do you know?

政府在增加土地供應方面採取多管齊下策略，以滿足本港長遠的社會及經濟需要。發展岩洞是策略下其中一個可行選項。本署負責搬遷合適的配水庫往岩洞，以釋放土地作其他更合適的發展用途。

Cavern development is a viable option under the Government's multi-pronged strategy to increase the land supply to meet Hong Kong's long-term social and economic needs. WSD is responsible for relocating suitable service reservoirs into caverns to release their sites for other more beneficial developments.

減低環境影響

塑造安全優美的景觀

本署一直致力將其設施及斜坡與周邊自然環境融合，打造安全及綠意盎然的景觀。在二零一八年超強颱風「山竹」吹襲後，斜坡安全組的園林服務小組透過加強樹木管理及樹木風險評估，為二零一九年風雨季來臨作好準備。該組已評估及跟進大約7,000棵樹木，並已採取一系列適當的預防措施，避免樹木因狂風暴雨而倒塌。

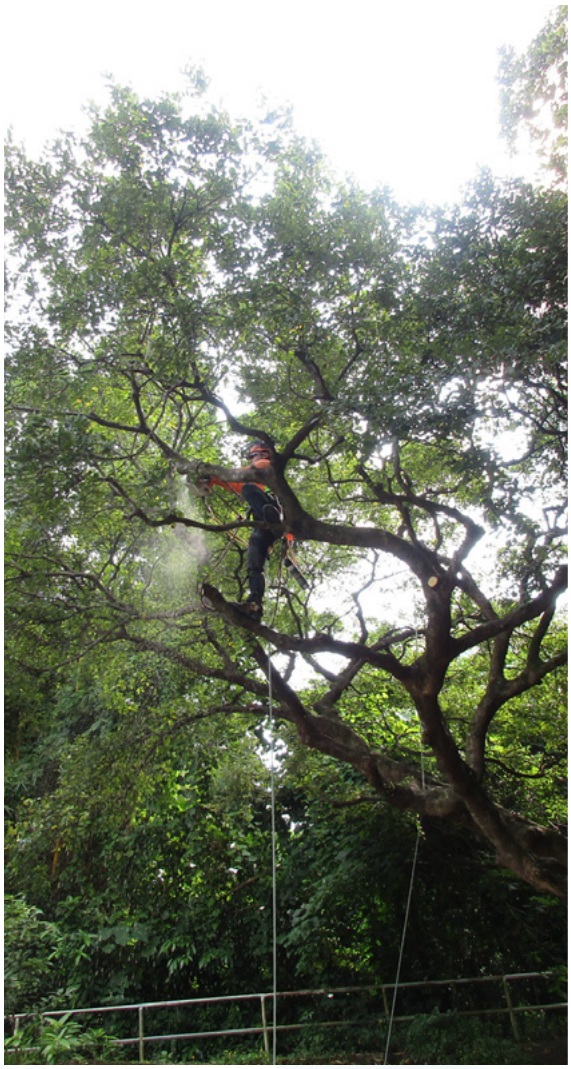
為公眾安全起見，如無有效措施將樹木倒塌的風險降至可接受水平，相關樹木將被移除，並補種合適的植物品種，例如低保養要求、低耗水量和具生態價值的本土植物，以提升本地生物多樣性。

ENVIRONMENTAL MITIGATION

Ensuring a Safe and Green Landscape

WSD has been striving to provide a safe and green landscape within its installations and slopes that blends in with the surrounding natural environment. After Super-typhoon Mangkhut's strike in 2018, the Landscape Service Unit of the Slope Safety Section prepared for the 2019 wet season by strengthening tree management and tree risk assessments. WSD has assessed and taken follow-up actions on approximately 7,000 trees and has adopted a series of appropriate precautionary measures to help avoid tree failure from squalls and heavy rain.

For public safety, in cases where no effective mitigation measures are available to reduce the risk of tree failure to an acceptable level, relevant trees will be removed. They will be replaced with suitable plant species, such as low maintenance and low water consumption native species with high ecological value, to enhance local biodiversity.



盡量減低建造工程的影響

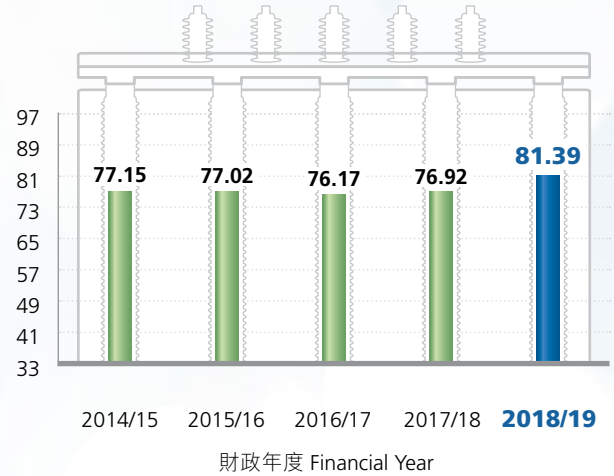
本署的設計及建設科負責在規劃、設計及建造階段確保水務建造工程對環境所造成的影響降至最低。設計及建設科已於二零一八年六月就供水工程項目獲頒ISO 14001: 2015環境管理體系標準認證。此外，本署亦制訂多項環境管理計劃，並每年進行檢討，以實現本署的環保目的及目標。

Minimising Construction Impact

The New Works Branch of WSD is responsible for ensuring that the environmental impact of waterworks construction works is minimised throughout planning, design and construction stages. In June 2018, the Branch obtained ISO 14001:2015 Environmental Management System Standards certification on the delivery of engineering projects for the provision of water supplies. A host of environmental management programmes are also developed and reviewed each year to achieve our environmental objectives and targets.

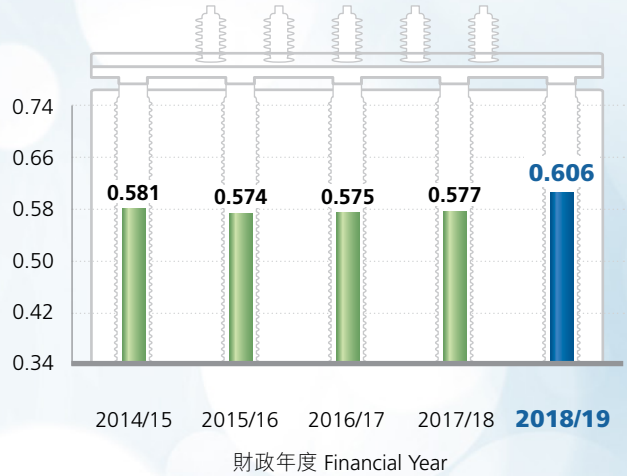
人均耗電量（食水及原水）
Per Capita Electricity Consumption (Fresh Water and Raw Water)

千瓦時/每人/每年 kWh/head/year



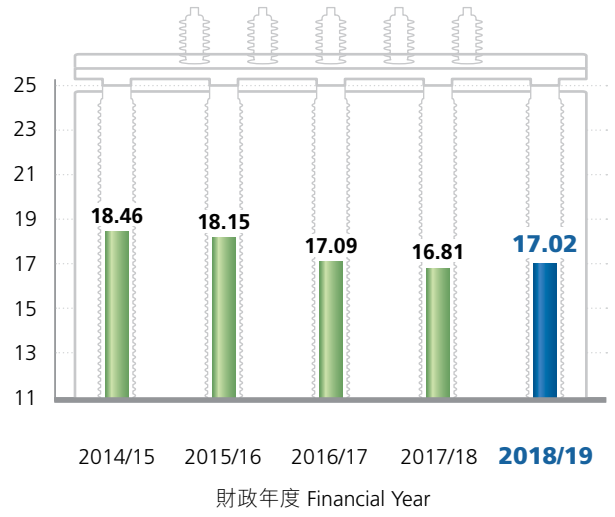
每單位耗電量（食水及原水）
Unit Electricity Consumption (Fresh Water and Raw Water)

千瓦時/立方米 kWh/m³



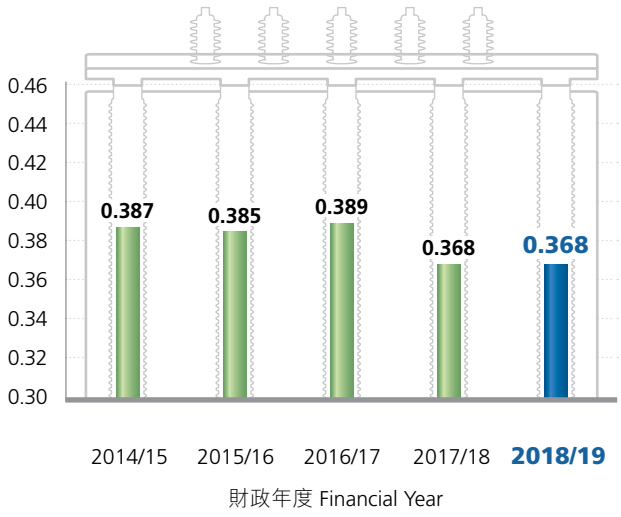
人均耗電量（海水）
Per Capita Electricity Consumption (Salt Water)

千瓦時/每人/每年 kWh/head/year



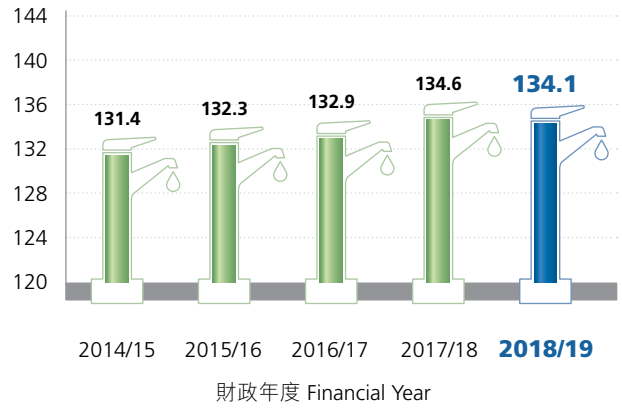
每單位耗電量（海水）
Unit Electricity Consumption (Salt Water)

千瓦時/立方米 kWh/m³



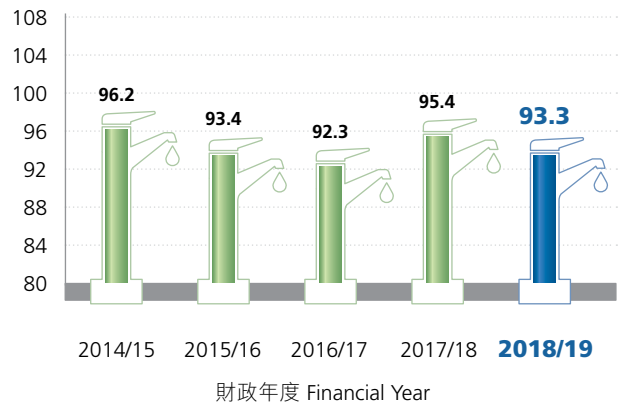
人均住宅食水用量
Per Capita Domestic Fresh Water Consumption

公升/日 Litres/day



人均沖廁水用量（食水及海水）
Per Capita Flushing Water Consumption (Fresh Water and Salt Water)

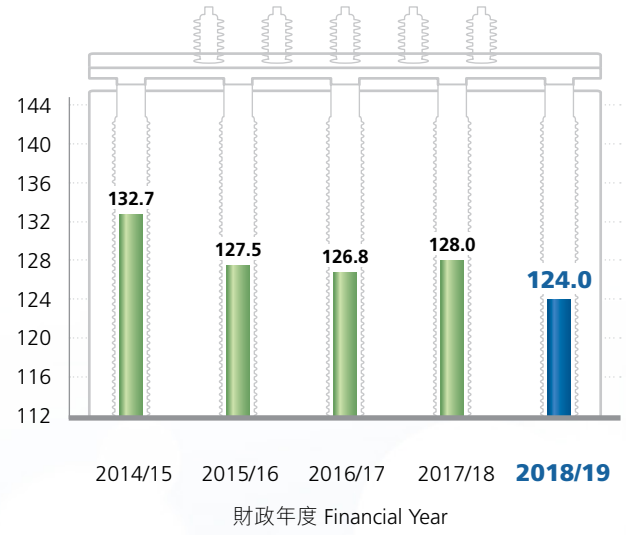
公升/日 Litres/day



註：人均沖廁水用量（食水及海水）是根據本港的沖廁水總用量計算而得。
Note : Per Capita Flushing Water Consumption (Fresh Water and Salt Water) is based on the total flushing water consumption in Hong Kong.

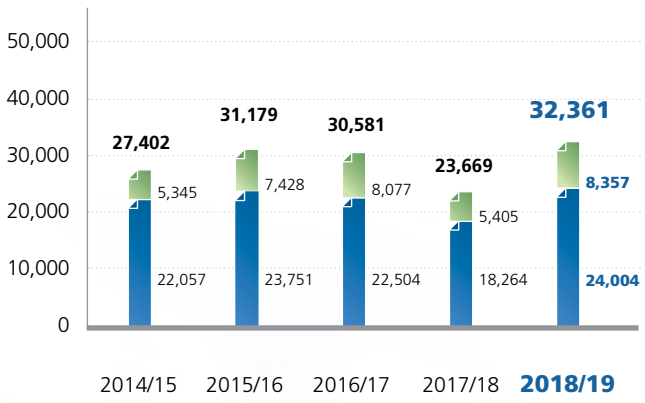
辦公室每單位樓面面積的耗電量
Office Electricity Consumption Per Unit Floor Space

千瓦時/平方米 kWh/m²



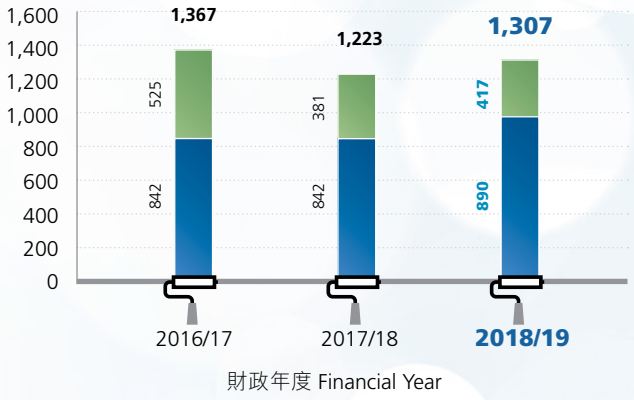
耗紙量
Paper Consumption

令 Reams



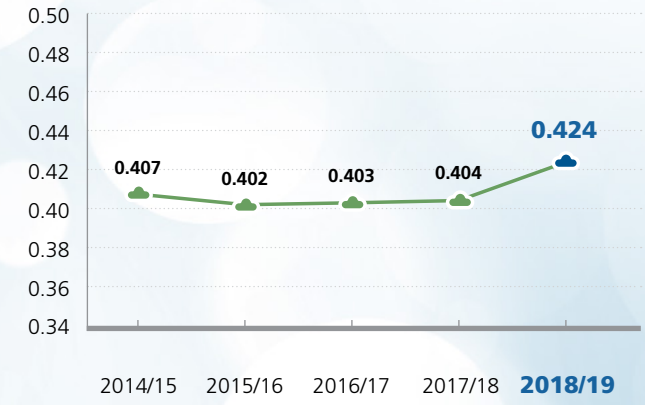
內部工作所需揮發性有機化合物耗用量
VOC Consumption for In-house Work

公斤 kg



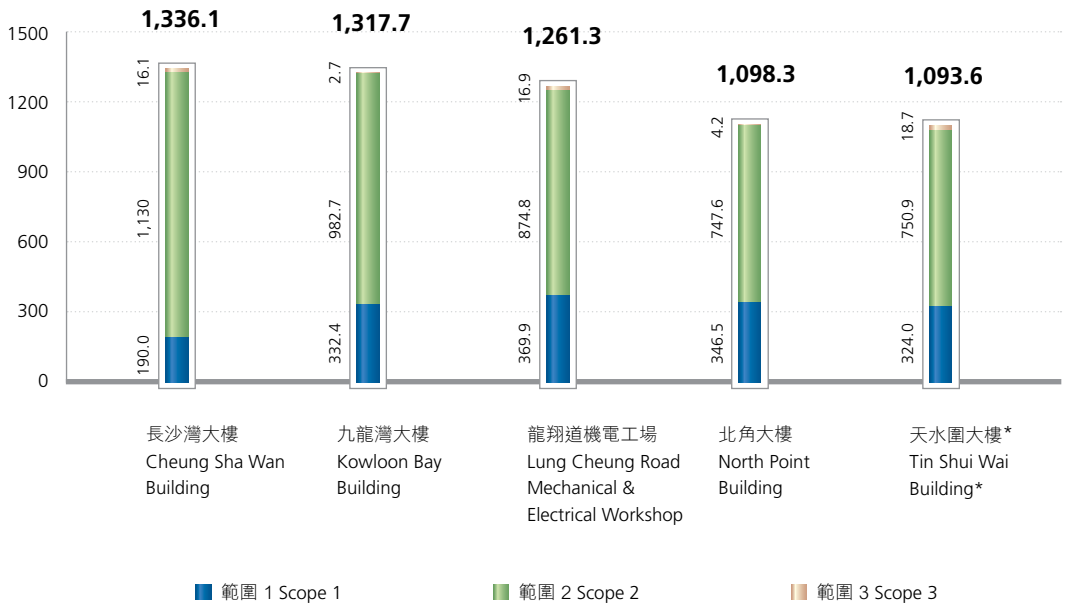
本署因使用電力處理食水而出現的溫室氣體排放
Green House Gas (GHG) Emissions Due to Electricity Used for Fresh Water Processing by WSD

千克二氧化碳/立方米 kg CO_2/m^3



二零一八至一九財政年度碳審計報告
Carbon Audit Report for Financial Year 2018/19

地點 Location	公噸二氧化碳當量 Tonnes of CO_2 - equivalent			
	範圍1 Scope 1	範圍2 Scope 2	範圍3 Scope 3	總量 Total
長沙灣大樓 Cheung Sha Wan Building	190.0	1,130.0	16.1	**1,336.1**
九龍灣大樓 Kowloon Bay Building	332.4	982.7	2.7	**1,317.7**
龍翔道機電工場 Lung Cheung Road Mechanical & Electrical Workshop	369.9	874.8	16.9	**1,261.3**
北角大樓 North Point Building	346.5	747.6	4.2	**1,098.3**
天水圍大樓* Tin Shui Wai Building*	324.0	750.9	18.7	**1,093.6**



註： 範圍1－直接溫室氣體排放量
範圍2－使用能源間接引致的溫室氣體排放量
範圍3－其他間接溫室氣體排放量

Note: Scope 1 – Direct GHG Emissions
Scope 2 – Energy Indirect GHG Emissions
Scope 3 – Other Indirect GHG Emissions

* 由於天水圍大樓於二零一八年八月才啟用，該大樓報告只涵蓋二零一八年八月至二零一九年三月。
As the Tin Shui Wai Building was commissioned in August 2018, the reporting period of the building only covers August 2018 to March 2019.

公用集調車輛資料
Information on Vehicle Pool Transport

	投入運作的政府車輛 No. of Government Vehicles in Operation			總燃料耗用量（公升） Total Fuel Consumption (Litres)			總車程（公里） Total Mileage (km)		
財政年度 Financial Year	16/17	17/18	**18/19**	16/17	17/18	**18/19**	16/17	17/18	**18/19**
柴油 Diesel	28	58	**85**	34,554	67,818	**144,386**	163,522	357,842	**771,660**
汽油 Petroleum	163	158	**123**	511,092	479,787	**398,065**	2,424,315	2,216,830	**1,997,606**
混合（汽油/電力） Hybrid (Petrol/ Electric)	16	3	**3**	11,678	12,077	**2,067**	189,569	174,524	**38,858**
液化石油氣 LPG	11	11	**11**	55,940	51,379	**43,503**	160,744	139,457	**121,690**
電力 Electricity	20	16	**15**	–	–	**–**	101,237	98,845	**122,293**

廢氣排放
Emissions

（以公噸計） (Figures in Tonnes)	二氧化碳 CO_2			二氧化硫 SO_2			氮氧化物 NO_x			可吸入懸浮粒子 RSP		
財政年度 Financial Year	16/17	17/18	**18/19**	16/17	17/18	**18/19**	16/17	17/18	**18/19**	16/17	17/18	**18/19**
直接廢氣排放 Direct Emissions												
車輛（柴油） Vehicle fleet (Diesel)	82	154	**347**	-	-	**-**	1	2	**4**	-	-	**-**
車輛（汽油） Vehicle fleet (Petrol)	1,129	1,075	**899**	-	-	**-**	1	1	**1**	-	-	**-**
車輛（液化石油氣） Vehicle fleet (LPG)	93	97	**73**	-	-	**-**	-	-	**-**	-	-	**-**
間接廢氣排放 Indirect Emissions												
耗用電（九龍及新界） Electricity Consumed (Kowloon and New Territories)	320,938	315,317	**318,021**	91	86	**86**	293	261	**261**	6	8	**8**
耗用電（港島） Electricity Consumed (Hong Kong Island)	50,886	52,184	**52,570**	16	14	**14**	52	51	**51**	1	1	**1**
總量 Total	373,128	368,826	**371,909**	107	100	**100**	346	314	**316**	8	10	**10**

可持續發展及節水大事回顧
Sustainability & Conservation Event Highlights

凝聚大眾 共同節約用水
Uniting Everyone to Save Water

水務署積極參與各式各樣與水有關的活動，善用每個機會提高市民節約用水的意識。

WSD actively participates in all kinds of water-related activities, seizing every opportunity to raise public awareness of water conservation.

▲ *本署致力透過學校及公眾教育活動，培育年輕一代的節約用水文化。*
WSD has devoted much effort in school and public education activities with the aim of nurturing a water conservation culture amongst the younger generation.

>4,000

位參加者
participants

2018 April 四月

香港水足印定向2018

活動由和富社會企業主辦、本署及香港公開大學協辦，於二零一八年四月二十二日在沙田馬場舉行。透過城市定向比賽和與水有關的任務，啟發參加者於日常生活中節約用水。本署除了組隊參賽外，亦設置遊戲攤位，宣揚節約用水的訊息。

Hong Kong Water Race 2018

Organised by Wofoo Social Enterprises and co-organised by WSD and the Open University of Hong Kong, this event was held on 22nd April 2018 at the Sha Tin Racecourse. Through the city orienteering competition and water-related tasks, participants were inspired to conserve water in their daily lives. WSD joined the race and set up game booths to promote water conservation.

2018 May 五月

活水 • 行2018

活動由愛德基金會主辦，於二零一八年五月五日舉行，旨在為中國內地偏遠山區籌款，用作興建用水設施。本署全力支持活動，設置遊戲攤位，並安排義工教育市民如何在日常生活中節約用水。

Walk for Living Water 2018

This event was organised by the Amity Foundation on 5th May 2018 to raise funds for building water facilities in the remote mountainous areas in Mainland China. WSD fully supported the event, setting up game booths and sending volunteers to educate the public about saving water in daily life.

點滴揹水Walk & Run 2018

本署於二零一八年五月六日參與由點滴是生命舉辦的這項活動，為中國內地、尼泊爾及柬埔寨籌款建設儲水和淨水設施。當天活動由水務署副署長周世威先生擔任主禮嘉賓，而本署義工隊亦在場協助及設置遊戲攤位推廣節約用水。

Walk & Run for Water 2018

WSD joined this event held by A Drop of Life on 6th May 2018 to help raise funds to build water storage and sanitation facilities in Mainland China, Nepal and Cambodia. The Deputy Director of Water Supplies Mr. CHAU Sai-wai officiated at the event, while WSD's Volunteer Team offered assistance and set up game booths to promote water conservation.

2018
June
六月

香港綠色日2018

本署參與這項由環保促進會舉辦的活動，鼓勵市民身體力行為環保出力。本署是活動的支持機構之一，並獲邀參與二零一八年六月五日舉行的啟動禮，推廣珍惜用水的重要性和加強市民節約用水的知識，以及六月二十四日舉行的壓軸活動：閉幕禮暨著「綠」智激鬥。

Hong Kong Green Day 2018

WSD joined this Green Council event to encourage Hong Kong citizens to "Go Green, Act Green!" As one of the supporting organisations, WSD was invited to promote the importance of cherishing water and enhance the public's knowledge of water conservation at the Kick off Ceremony on 5th June 2018 and the finale activity on 24th June 2018, the Closing Ceremony cum Green Mission Challenge.

世界環境日2018—零廢FUN墟

活動於二零一八年六月十日由環境運動委員會舉辦，共有超過30個機構參與，攜手提高市民減少浪費及注重環保的意識。本署作為協辦機構之一，於活動中設置展覽及遊戲攤位，向公眾宣揚節約用水的訊息。

World Environment Day 2018 - Zero Waste Fun Fair

As one of the co-organisers, WSD set up an exhibition and game booths to convey water-saving message to the public in this event, which was organised by the Environmental Campaign Committee on 10th June 2018. Jointly supported by over 30 organisations, the event promoted waste reduction and environmental awareness among the public.

水資源教育中心工程項目展開

水資源教育中心展覽廳及相關區域的裝修工程(合約編號6/WSD/18)批出予俊和高雅—金明聯營。工程合約包括製作及安裝約50個展品、更改及安裝屋宇裝備，以及進行其他相關工程。合約簽署儀式於二零一八年七月二十日舉行。

2018 July 七月

Water Resources Education Centre Project Launch

The fitting out project of the exhibition halls and associated areas at the Water Resources Education Centre (Contract No. 6/WSD/18) was awarded to Chun Wo Elegant – Kingsmen Joint Venture. This contract covers the fabrication and installation of approximately 50 exhibits, as well as the modification and installation of building services and other associated works. A contract-signing ceremony was held on 20th July 2018.

2018 October 十月

香港生物多樣性節2018

為培育公眾欣賞大自然和推動生態保育的風氣，本署於二零一八年十月二十一日和十一月十日舉辦大潭水務文物徑生態及歷史導賞團。這項活動是漁農自然護理署聯同各政府部門和機構舉辦的香港生物多樣性節2018當中的活動。公眾透過導賞團了解本港水務歷史的一些重要里程碑，沿途更可欣賞自然生態和認識本地的生物多樣性。

Hong Kong Biodiversity Festival 2018

To foster the public's appreciation for nature and ecological conservation, WSD arranged guided tours to the Tai Tam Waterworks Heritage Trail (Ecology and History) on 21st October 2018 and 10th November 2018. These events were part of the Hong Kong Biodiversity Festival 2018 organised by the Agriculture, Fisheries and Conservation Department, in collaboration with other Government departments and organisations. Through the tours, the public learned about the important milestones of the local waterworks history and appreciated the natural ecology and the local biodiversity along the way.

國際環保博覽2018

為響應活動主題「減廢節能•共創低碳未來」，本署於活動中以安達臣道石礦場用地發展項目作為範例，介紹及推廣節約用水及中水重用。活動由環境局與香港貿易發展局合辦，於二零一八年十月二十五日至二十八日假亞洲國際博覽館舉行。本署亦參與研討會和公眾日專題論壇，討論和講解智能供水措施。

ECO Expo Asia 2018

Echoing the theme "Waste Less, Save More for a Low-carbon Future" of the event, WSD introduced and promoted water conservation and grey water recycling through an exhibition featuring Anderson Road Quarry Site Development as an example. This event was jointly organised by the Environment Bureau and the Hong Kong Trade Development Council at the AsiaWorld-Expo from 25th to 28th October 2018. WSD also attended the seminars and public day forum to discuss and illustrate smart water supply initiatives.

保護清潔海洋水陸歷奇挑戰賽

本署作為活動支持機構，派出義工隊協助香港青年協會於二零一八年十一月四日舉辦這項活動。活動鼓勵青年人保護珍貴的海洋生態和水資源。本署亦有派隊參加挑戰賽。活動讓參加者在船灣淡水湖堤壩及大美督鄰近海岸享受做運動的樂趣和幽美景色，同時親身體會保護海洋環境和水資源的重要性。水務署副署長周世威先生於頒獎禮擔任主禮嘉賓。

2018 November 十一月

Love Our Oceans Marine Conservation Adventure Challenge

As a supporting organisation, WSD assigned Volunteer Team to assist the Hong Kong Federation of Youth Group on 4th November 2018 in staging this event, which encouraged the younger generation to protect the precious marine environment and water resources. WSD also deployed teams to join the adventure challenge. Whilst enjoying sports in the beautiful scenery of the dam of Plover Cove Reservoir and the coastal areas of Tai Mei Tuk, participants experienced the importance of protecting our marine environment and water resources. Deputy Director of Water Supplies Mr. CHAU Sai-wai was the Guest of Honour at the award presentation ceremony.

7.4 公里 km

步行由馬鞍山郊野公園作起點，途經昂坪營地及信義會鞍山探索館
Walk from Ma On Shan Country Park, via Ngong Ping Viewing Point and the Evangelical Lutheran Church of Hong Kong – Grace Youth Camp

華懋行2018

本署於二零一八年十一月四日參與由華懋集團主辦的華懋行2018，設置遊戲攤位，推廣節約用水。此活動以「至愛我家」為主題，步行活動以馬鞍山郊野公園作起點，途經昂坪營地及信義會鞍山探索館，全程約7.4公里。參加者沿途認識居住在馬鞍山上村落的礦工和他們家庭的生活，領略保育、社會共融及綠色生活的重要性。

Chinachem Eco-Walk 2018

To promote water conservation, WSD set up a game booth at this event organised by the Chinachem Group on 4th November 2018. Themed under "My Sweet Home", the approximately 7.4km walk started from Ma On Shan Country Park, via Ngong Ping Viewing Point and the Evangelical Lutheran Church of Hong Kong – Grace Youth Camp. Participants got a glimpse of the life of miners and their families living in the village in Ma On Shan to understand the importance of conservation, social harmony and green living in Hong Kong.

惜水學堂頒獎典禮暨學前計劃啟動禮

為表揚在二零一七至一八學年積極參與惜水學堂節約用水教育計劃的小學，並正式宣佈將節約用水教育計劃拓展到學前教育，本署於二零一八年十一月十六日假坑口社區會堂舉行頒獎典禮暨學前計劃啟動禮。出席典禮的嘉賓包括水務署署長黃仲良先生、水務諮詢委員會主席陳漢輝博士、教育局首席助理秘書長(幼稚園教育)陳蕭淑芬女士，以及教育局首席教育主任(課程發展)謝婉貞女士。

Cherish Water Campus Award Ceremony cum Kick-off Ceremony for the Kindergarten Integrated Education Programme

To commend the primary schools that actively participated in the 2017/18 Cherish Water Campus Integrated Education Programme (IEP), as well as to officially announce IEP's extension to the pre-primary education level, an award ceremony cum kick-off ceremony for kindergarten IEP was held by WSD on 16th November 2018 at Hang Hau Community Hall. Director of Water Supplies Mr. WONG Chung-leung was joined by the Chairman of the Advisory Committee on Water Supplies Dr. CHAN Hon-fai, Principal Assistant Secretary (Kindergarten Education) of the Education Bureau Mrs. CHAN SIU Suk-fan and Principal Education Officer (Curriculum Development) of the Education Bureau Ms. TSE Yuen-ching, Edith at the ceremony.

>100

名校長及師生獲獎
principals, teachers and students awarded

2018
December
十二月

惜水大使計劃委任典禮

惜水大使計劃委任典禮及工作坊於二零一八年十二月一日假香港青年協會賽馬會Media 21媒體空間進行。本署在二零一八至一九學年首次推行此計劃，以培養中學生及大專生的惜水文化意識。水務署署長黃仲良先生在典禮中與參加者分享節約用水的訊息。

Cherish Water Ambassador Appointment Ceremony

The appointment ceremony and workshop of the Cherish Water Ambassador Scheme were held on 1st December 2018 at the Hong Kong Federation of Youth Groups Jockey Club Media 21 (M21). WSD debuted this scheme in 2018/19 to nurture water conservation awareness in students of secondary schools and tertiary institutions. The Director of Water Supplies Mr. WONG Chung-leung attended the event to share insights in water conservation with the participants.

綠遊香港計劃之水務百年(大潭郊野公園)生態文物導賞團

為推廣可持續發展及環境保育，本署聯同港燈和長春社於二零一八年十二月十六日舉行生態文物主題導賞團。導賞員向參加者介紹大潭水務文物徑沿途的生態特色和水務設施的歷史，參加者同時亦可欣賞大潭美麗的水塘風景。

A Century of Water Services (Tai Tam Country Park) under the Green Hong Kong Green Project

To promote sustainable development and environmental conservation, WSD joined hands with HK Electric and the Conservancy Association to organise a thematic ecoheritage guided tour on 16th December 2018. The tour guides introduced to the visitors the ecological features and history of various waterworks structures along the Tai Tam Waterworks Heritage Trail. Visitors also enjoyed the beautiful scenery of the reservoirs at Tai Tam.

第四屆油麻地榕樹頭節

本署吉祥物滴惜仔應油麻地街坊福利事務促進會邀請，於二零一八年十二月十六日出席第四屆油麻地榕樹頭節。活動以環保為主題，透過比賽、文化攤位及手作市集，宣傳油麻地區引人入勝的歷史與傳統文化，並推廣「揀少啲、慳多啲、識回收」的訊息。滴惜仔當天為比賽參加者打氣，以及提醒市民節約用水。

4th Yau Ma Tei Festival

Water Save Dave, the WSD's mascot, was invited to attend the 4th Yau Ma Tei Festival organised by the Yaumatei Kaifong Welfare Advancement Association on 16th December 2018. The Festival adopted "Environmentally-Friendly" as the main theme of the event. A competition, cultural booths and a handicraft fair were held to promote the fascinating history and traditional culture of the Yau Ma Tei District and the message of "Dump Less, Save More, Recycle Right". Water Save Dave cheered the contestants and reminded the public to save water during the event.

2019
January
一月

環保嘉年華2019

本署全力支持此項由環保促進會主辦的活動，向市民推廣綠色及低碳生活。活動於二零一九年一月二十日在九龍公園廣場舉行，水務署助理署長黃恩諾先生在開幕禮上擔任主禮嘉賓並致辭。作為活動的支持機構，本署擺設遊戲攤位推廣節約用水。

Green Carnival 2019

WSD fully supported this event, which was organised by the Green Council to promote a green and low-carbon lifestyle. The event was held on 20th January 2019 at the Kowloon Park Piazza. The Assistant Director of Water Supplies Mr. WONG Yan-Lok officiated at the opening ceremony and delivered a speech. As a supporting organisation, WSD set up a game booth at the event to promote water conservation.

2019 March 三月

揹水一戰2019

本署在二零一九年三月九日參加了此項由點滴是生命舉辦的活動，為中國內地的乾旱地區、尼泊爾和柬埔寨偏遠山區籌款興建供水設施。活動在山頂舉行，參加者須揹負4.5公升的水樽，親身體驗為取水而長途跋涉的苦況。水務署助理署長黃恩諾先生在活動中致辭，鼓勵參加者在日常生活中節約用水。

Race for Water 2019

WSD joined this event organised by A Drop of Life on 9th March 2019 to raise funds for building water supply facilities in arid regions of Mainland China and remote mountainous regions of Nepal and Cambodia. Participants carried 4.5 litres of bottled water at the Peak to experience the hardship of travelling long distances to fetch water. Assistant Director of Water Supplies Mr. WONG Yan-Lok delivered a speech at the event and encouraged participants to save water in their daily lives.

著綠狂奔2019

活動由環保促進會主辦，於二零一九年三月二十四日舉行。參加者穿著綠色衣物，沿香港科學園及白石角海濱長廊進行長跑比賽。水務署副署長周世威先生除了主持起步禮外，亦與其他嘉賓一同參與「一公里綠色領袖賽」。此外，本署亦於活動設置遊戲攤位推廣節約用水。

Green Run 2019

This event was organised by the Green Council on 24th March 2019. Participants dressed in green for a distance competition along Hong Kong Science Park and Pak Shek Kok Promenade. Apart from officiating at the kick-off ceremony, Deputy Director of Water Supplies Mr. CHAU Sai-wai and other guests also joined the "1 Kilometre Green Leaders Race". WSD set up a game booth at the event to promote water conservation.

>1,000

名參加者

participants

善用科技　服務用心
Leverage Technology
Serve with Heart

“水務署專注為客戶帶來
優質及親切友善的服務。

WSD
is dedicated to providing
high-quality, and user-friendly
service to our customers.”

卓越服務

Service Excellence

客戶服務
Customer Service

服務高效盡心 回應客戶所需
A Dedicated, Responsive, and Customer-Oriented Approach

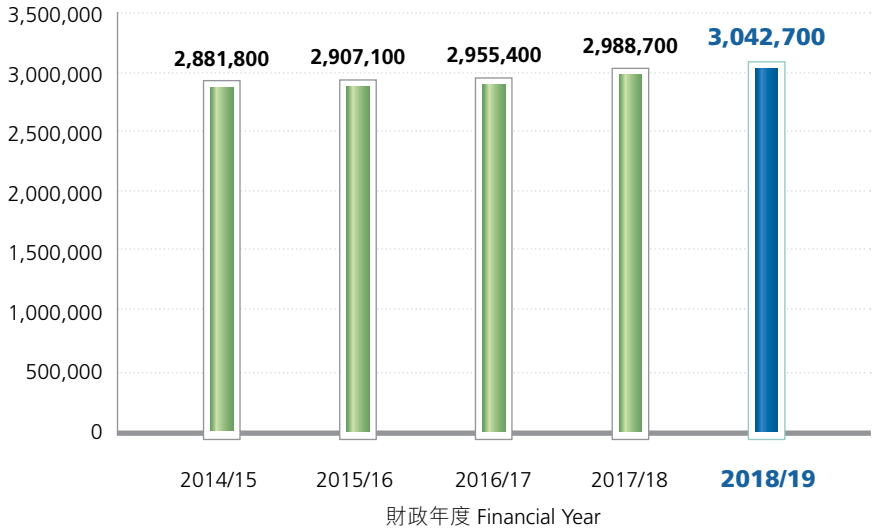
水務署致力為客戶帶來高效全面、重視溝通的服務。

WSD is dedicated to providing customers with effective, comprehensive and communicative services.

港九新界五個客戶諮詢中心及24小時客戶服務熱線，竭誠服務客戶。

There are five Customer Enquiry Centres in Hong Kong, Kowloon and New Territories, and a 24-hour customer service hotline to provide dedicated services to our customers.

客戶數目
Number of Accounts



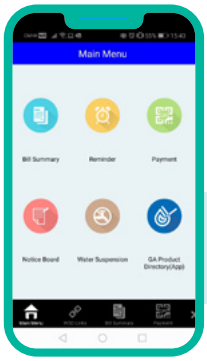
提升服務

轉數快

由二零一九年年底開始，客戶將可以使用「轉數快」來繳交水費。

水務署流動應用程式

於本財政年度，本署將流動應用程式升級，以提供更佳服務。此免費應用程式讓客戶查閱其帳戶的重要資訊、利用二維碼於便利店繳交水費、收取其分區的暫停供水通告，以及查看獲本署一般認可的水喉產品目錄。



免費下載「水務署流動應用程式」
Download the WSD Mobile App for free

iOS version

Android version

電子帳單服務

截至二零一九年三月三十一日，有超過90,000客戶選擇收取電子帳單。除了更為環保外，電子帳單亦提供多項增值服務，包括即時以電郵接收最新電子帳單、接收繳費提示電郵、查閱過去兩年的用水及付費記錄等。

91,600
客戶接收電子帳單
customers receiving e-Bill Service

19%
全年增長
annual growth

水錶

為保持水錶的準確度，舊水錶會被定期更換。於本財政年度，本署調整了更換策略，在參考水錶使用年期的同時，更注重更換已超過其設計轉數的水錶。

45,300
個小型水錶於二零一八至一九年度被更換
small meters replaced in 2018/19

3,600
個大型水錶於二零一八至一九年度被更換
large meters replaced in 2018/19

SERVICE IMPROVEMENTS

Faster Payment System

By the end of 2019, customers will be able to pay water bills through the Faster Payment System (FPS).

WSD Mobile App

This financial year, WSD upgraded its Mobile App to provide better services. The free-of-charge App allows customers to view important information of their water accounts, use a QR code to make payments at convenience stores, receive water suspension notices relevant to their sub-district, and also retrieve information on the directory of plumbing products that have the general acceptance by WSD.

e-Bill Service

As of 31st March 2019, over 90,000 customers have opted to receive electronic water bills. Apart from being more environmentally friendly, the e-Bill service also offers value-added services including receiving new bills by e-mail instantly, receiving e-mail payment reminders, viewing water consumption records and payment history for the last two years, etc.

Meters

To maintain meter accuracy, aged water meters are replaced on a regular basis. In this financial year, WSD adjusted the replacement strategy to focus more on meters that have reached their designed throughput whilst taking into account their years of usage.

緊密客戶聯繫

供水服務意見調查2018

於二零一八年，本署委托一間獨立機構就本署的服務及客戶滿意度進行意見調查。調查結果正面，顯示客戶滿意度高，令人鼓舞。調查結果將有助我們檢視現時的供水服務，以及研究可進一步改善服務的地方。

CONNECTING CLOSELY TO CUSTOMERS

Opinion Survey on Water Supply Services 2018

In 2018, WSD commissioned an independent organisation to conduct an opinion survey on our services and levels of customer satisfaction. The results were positive and encouraging with a high rate of customer satisfaction, and will serve as a useful reference for us when reviewing current water supply services and identifying areas for further improvement.

滿意度評分
Satisfaction Rate

住宅客戶
Domestic Customers

商業客戶
Commercial Customers

96.6%

90.8%

89.8%

92.3%

90.9%

客戶評分為「頗滿意至極之滿意」
customers rated "quite to very satisfied"

客戶聯絡小組

客戶聯絡小組旨在收集客戶的建議，並促進客戶與本署的溝通交流。於今屆委員任期(二零一七年五月至二零一九年一月)的最後一年，客戶聯絡小組參觀水務署北角大樓，以了解緊急維修水管的工作。在本財政年度，客戶聯絡小組亦出席簡介會，聽取有關電子帳單、節約用水、處理水管爆裂及滲漏的程序、減少水管滲漏，以及大廈內部供水系統水質事故的預防和處理的資訊。在二零一九年一月的會議後，客戶聯絡小組正式完成今屆任期的工作，為感謝各委員的參與，小組主席代表本署頒發感謝狀予每位委員。

Customer Liaison Group

The Customer Liaison Group (CLG) solicits suggestions from customers and facilitates the exchange of ideas between customers and WSD. In the last year of their appointment term (May 2017 to January 2019), the CLG visited the WSD North Point Building to learn about the emergency repair of water mains. During this financial year, the CLG also attended presentations and was briefed on e-billing, water conservation, procedures for handling water main bursts or leaks, reducing leakages in private mains, and avoiding and handling of water quality incidents in internal plumbing system. The CLG finished their duties with a meeting in January 2019. To express gratitude for their participation, Chairman of the CLG presented certificates to the members on behalf of WSD.

點滴話你知 Do you know?

客戶聯絡小組於二零一七年初進行改組，委員任期為兩年，委員數目由30名增至35名。「住宅客戶委員」是來自全港18區居民組織的代表，而「非住宅客戶」委員則為各行業代表。客戶聯絡小組每四個月開會一次。

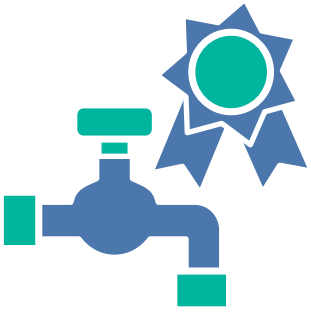
The organisation of CLG was revamped in early 2017. Members are appointed for a two-year term and the number of seats have been increased from 30 to 35. "Residential members" are representatives invited from the residents' organisations in 18 districts in Hong Kong, while "non-residential members" are representatives from various sectors. The CLG meets once every four months.

大廈水質

大廈優質供水認可計劃－食水

自二零一七年起，本署透過大廈優質供水認可計劃－食水(管理系統)向參與的業主及物業管理公司頒發證書，給予認可。這計劃發展自先前的大廈優質供水認可計劃－食水(2.0版)，加入了實施建築物水安全計劃的要求。計劃有效提升公眾對保障大廈內部供水系統食水水質的意識。

為協助制訂並實施建築物水安全計劃，本署已編製了適用於一般建築物、學校、安老院舍的建築物水安全計劃範本。目前，本署正與多間醫院合作，編製適用於醫院的建築物水安全計劃範本。



1,110

張證書頒發

certificates awarded

WATER QUALITY IN BUILDINGS

Quality Water Supply Scheme for Buildings - Fresh Water

Since 2017, WSD has issued certificates to recognise participating building owners and property management agents under the Quality Water Supply Scheme for Buildings - Fresh Water (Management System) (QMS). This scheme was developed from the previous Quality Water Supply Scheme for Buildings – Fresh Water (Plus) with incorporation of the requirement of implementation of the Water Safety Plan for Buildings (WSPB). The scheme has proven to be effective in enhancing the public awareness of safeguarding the quality of drinking water in the internal plumbing system in buildings.

To assist in formulating and implementing WSPB, WSD has developed WSPB templates suitable for general buildings, schools and residential care homes for the elderly respectively. WSD is currently working with several hospitals to develop a WSPB template for hospitals.

大廈優質供水認可計劃－沖廁水

由二零一三年起，本署頒發金、銀和藍證書給予業主及物業管理公司，以表揚他們在妥善保養其大廈的內部沖廁水供水系統的努力。

Quality Water Supply Scheme for Buildings - Flushing Water

WSD has awarded Gold, Silver and Blue certificates to building owners and property management agents since 2013 in recognition of their efforts to maintain the internal flushing water plumbing systems in their buildings.

1,612

張證書頒發

certificates awarded

員工發展
Staff Development

呈獻優質服務 培育出色員工
Outstanding Service, Outstanding Staff

水務署為致力提供高質供水服務，培育能力出眾的團隊。

WSD is dedicated to ensuring high-quality water supply services by developing staff with excellent capabilities

本署健兒參加2018建造業運動會暨慈善同樂日室內划艇比賽。

WSD participants in the indoor rowing competition in the Construction Industry Sports Day and Charity Fun Day 2018.

提升工作能力

跨部門培訓

於本財政年度，本署繼續參與工程師講座。該知識分享計劃每星期舉行一次講座，旨在讓本署與土木工程拓展署、路政署、渠務署及運輸署的工程師之間建立互相學習的文化。講者包括具備寶貴知識及專門經驗的專業人士。

ENHANCING COMPETENCIES

Inter-departmental Trainings

This financial year, WSD continued to participate in ENGINEER Talks, a weekly knowledge-sharing programme with a view to building up a culture of mutual learning with the other engineers in Civil Engineering and Development Department, Highways Department, Drainage Services Department, Transport Department. The speakers include professionals with valuable knowledge and specialised experience.

濾水廠培訓小組

於二零一八至一九年度，培訓小組舉行了五場講座，讓員工能夠掌握最新的濾水廠設計、建造、濾水程序和運作等方面的知識。展望未來，我們將會邀請更多水務專家為本署人員分享先進的技術知識。

Training Group on Water Treatment Works (WTW)

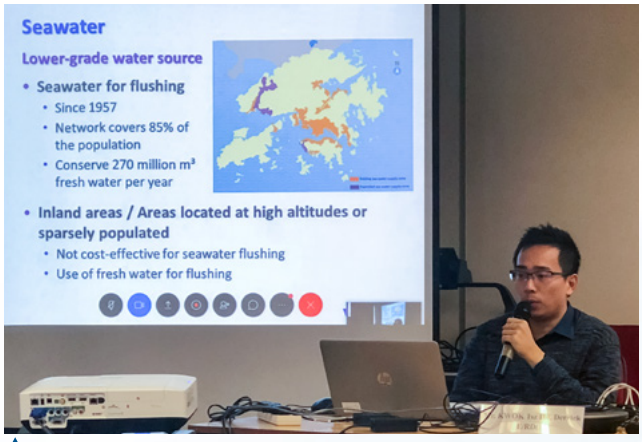
The training group held five seminars in 2018/19 to equip staff with the latest knowledge about design, construction, water treatment processes and operation of WTW. More water experts will share their advanced technical knowledge with WSD staff in future.

其他培訓工作

本署人員參加了多個技術及管理層面的培訓計劃，以提升他們的技能，特別是在食水處理、食水安全、測漏、供水管網管理和資訊科技方面。

Other Comprehensive Trainings

WSD staff members participated in various technical and managerial training programmes to enhance their skills, particularly in the areas of water treatment, drinking water safety, leak detection, water supply network management and information technology.



本署同事在工程師講座分享在香港使用循環再用水的知識和經驗。

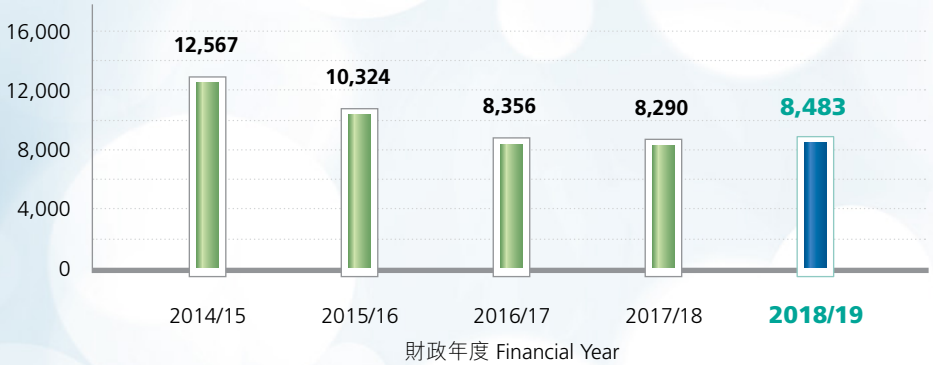
A WSD colleague shared his knowledge and experience on the use of recycled water in Hong Kong in an ENGINEER Talk.

8,483

個員工培訓工日
（二零一八至一九年度）

man-days of staff training
(in 2018/19)

培訓工日
Training Man-days



建立盡心盡力的團隊

職業安全

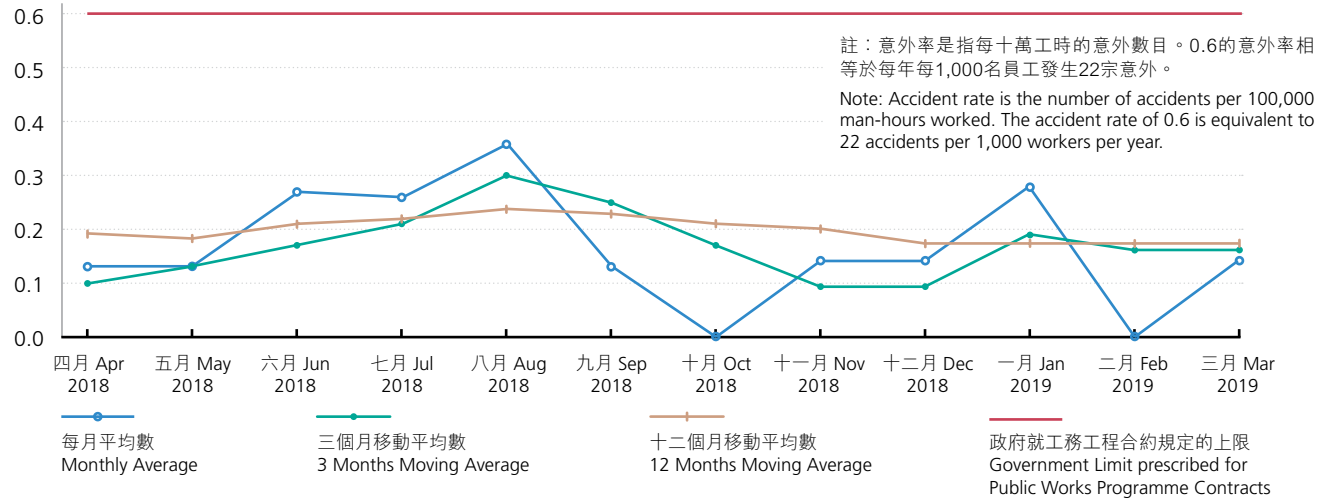
本署的水務工程合約持續保持低意外率，遠低於政府就工務工程合約規定的上限。

BUILDING A COMMITTED WORKFORCE

Occupational Safety

WSD has maintained a consistently low accident rate in its waterworks contracts, well below the Government's limit for public works programme contracts.

二零一八至一九年度水務工程合約意外率
Accident Rate in Waterworks Contracts 2018/19



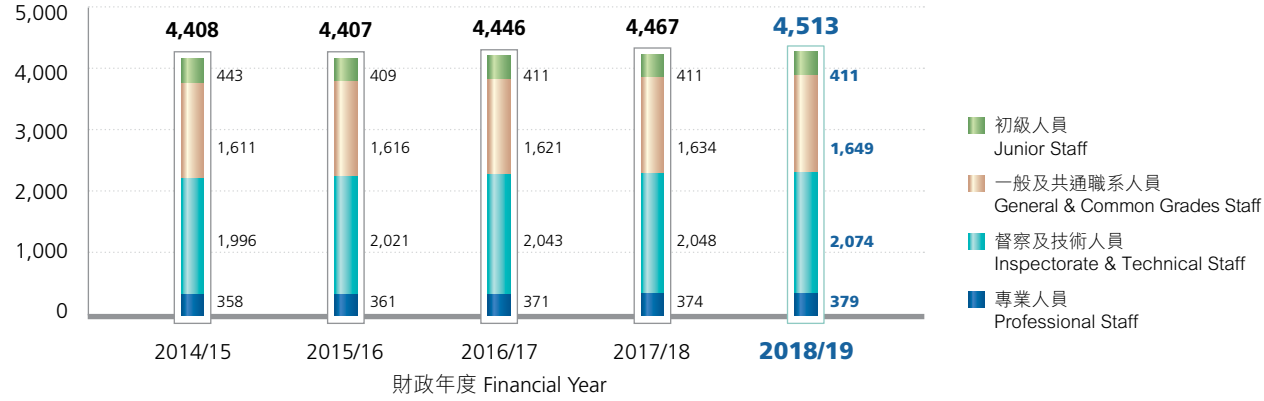
溝通渠道

為與員工就共同關切的事項坦誠溝通，本署的部門協商委員會及轄下小組委員會提供了有用的平台。本署亦會與員工工會舉行特別諮詢會議及簡報會，而高級管理層人員亦定期到訪各辦事處、水務設施及工地，以激勵士氣、了解員工的需要和解答他們關切的事項。由本財政年度開始，本署並為舉行歡迎茶會讓高級管理層人員與新入職員工見面，建立友好的工作環境。

Channels of Communication

WSD's Departmental Consultative Committee and sub-committees provide a useful forum for open communication about issues of common concern with the staff. In addition, ad-hoc consultative meetings and briefings are held with staff unions. WSD senior management also regularly visits individual offices, installations and work sites to boost staff morale, understand the needs of the staff and address their concerns. Starting from this financial year, tea gatherings were held for the WSD senior management to meet the new recruits with a view to building a friendly work environment.

員工編制
Staff Establishment



員工獎項及嘉許

本署提名出色的員工角逐優質服務獎項，包括公務員事務局局長嘉許狀及申訴專員嘉許公職人員獎等。

於二零一八至一九年度，本署獲頒多個獎項，包括2018申訴專員嘉許公職人員獎，以及建造業議會可持續建築大獎(項目業主－公營)金獎。

Staff Recognition and Awards

WSD recommends outstanding staff to complete for service-wide awards, including The Secretary for the Civil Service's Commendation Award and The Ombudsman's Awards for Officers of Public Organisations, etc.

In 2018/19, WSD was recognised by multiple awards, including the Ombudsman's Awards 2018 for Officers of Public Organisations and the Construction Industry Council Sustainable Construction Award (Project Owner - Public Sector) Gold Award.

▲ *發展局局長黃偉綸於建造業議會可持續大獎頒獎典禮頒發(項目業主—公營)類別金獎予水務署署長。*

Mr Michael WONG, Secretary for Development presented the Gold Award (Project Owner – Public Sector) to Director of Water Supplies in the CIC Sustainable Construction Award Presentation Ceremony.

齊心邁步向前

培養創新文化

本署推行多項激勵計劃，鼓勵員工出謀獻策，以改善服務和提升運作效率。此外，本署亦經常與學術機構合作，進行研究及發展項目。這些努力讓我們建立創新文化，員工提出創新建議，並作出試行及實踐。

UNITED FOR ADVANCEMENT

Nurturing a Culture of Innovation

WSD has introduced multiple motivation schemes that encourage staff to contribute ideas and opinions about improving services and enhancing operational efficiency. In addition, WSD frequently partners with academic institutions on research and development projects. The result of these efforts is a culture of innovation where new ideas are generated, tested and implemented.

點滴話你知 Do you know?

本署的研究及發展督導委員會於二零一六年成立，目的是透過與學術機構合作，將本署在供水技術方面的知識經驗與學界的領先研究相互結合，從而在供水服務上推行創新方案。

The WSD Steering Committee on Research and Development was established in 2016. Its mission is to encourage innovative solutions in water supplies by combining WSD's knowledge and experience on water-related technologies with academia's leading research work through collaborations with institutions.

▲ *二零一九年三月二十二日本署舉行了水務科研茶聚，與學者交流意見，成果豐碩。*
A tea gathering on research and development with fruitful exchange of views with academia was held on 22nd March 2019.

建立團隊精神

以運動加強凝聚力

本署員工不時組隊參加外界的運動比賽，加強同事與其他政府部門和合作夥伴之間的聯繫。於二零一八至一九年度，本署員工在多項運動比賽中取得佳績，包括由發展局體育委員會舉辦的跨部門比賽、由建造業議會舉辦的建造業運動會2018及建造業開心跑2019、第41屆香港賽艇錦標賽、2019端午節龍舟競渡、2018樂施毅行者等。此外，本署定期為員工舉辦各式各樣的康體活動，推動所有員工健康生活的模式。

BUILDING TEAM SPIRIT

Bonding through Sports

WSD staff frequently compete in teams in various external sports competitions to strengthen the bonds between staff, Government counterparts and industry partners. Remarkable results were achieved at a number of sports events in 2018/19 such as the inter-departmental tournaments held by the Development Bureau Sports Committee, the Construction Industry Sports Day 2018 and Construction Industry 2019 Happy Run organised by the Construction Industry Council, the 41st Hong Kong Rowing Championships, the Hong Kong Dragon Boat Festival 2019, the Oxfam Trailwalker 2018 and many others. In addition, WSD regularly hosts a wide variety of sports and recreational activities to foster a healthy lifestyle among all staff members.

參與義務工作回饋社會

為表達對社會持續的承擔和關懷，本署的義工團隊參與各種慈善活動，包括籌款募捐、探訪老人院和協助傷健人士等。於本財政年度內，社會福利署的義工運動督導委員會向本署熱心的義工頒發了金、銀、銅嘉許狀。

Giving Back Through Volunteering

To affirm their ongoing commitment and concern to the community, WSD Volunteer Team participated in charity events, including fund-raising, visiting elderly homes, assisting the disabled, etc. This financial year, the Steering Committee on Promotion of Volunteer Service of Social Welfare Department has recognised dedicated staff volunteers of WSD with Gold, Silver and Bronze awards.

>115

個慈善活動(二零一八至一九年度)
charity events (in 2018/19)

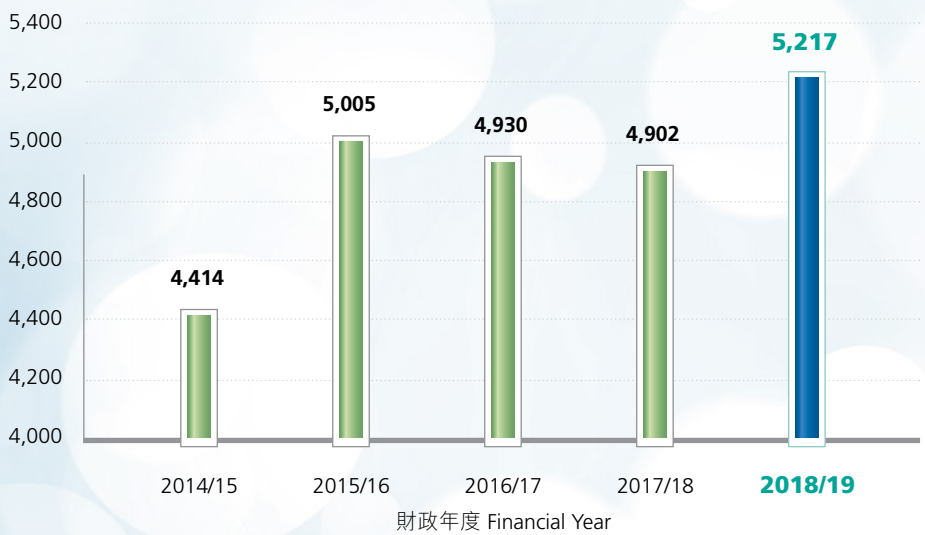
24

位員工獲頒嘉許狀(二零一八至一九年度)
staff awarded (in 2018/19)

5,217

個義工服務時數(二零一八至一九年度)
volunteer service man-hours (in 2018/19)

水務署義工服務時數
WSD Staff Volunteer Service Man-hours



卓越服務大事回顧
Service Excellence Event Highlights

將奉獻化作行動
Transforming Dedication into Action

水務署不斷探索新機遇，令可靠優質的供水服務得以進一步提升，並就緊急情況提供24小時支援。

WSD constantly seeks new opportunities to enhance reliable, quality water supply services, and provides round-the-clock support under emergency situations.

本署勇於面對困難，致力維持可靠的供水服務。
WSD is dedicated to braving all difficulties to maintain reliable water supply services.

提升處理供水申請效率

於本財政年度，本署推出了一項先導計劃，透過成立一支專責隊伍和簡化流程，加快審批餐飲業界的供水申請。過往，由於同一團隊同時要處理其他較為複雜的供水申請，令餐飲業界的供水申請有時出現延誤，影響他們的營業。有見及此，本署特別成立專責處理餐飲業界供水申請的隊伍，並為員工提供所需培訓。此外，本署亦推行一系列相關措施以加快處理供水

ENHANCING EFFICIENCY IN PROCESSING WATER SUPPLY APPLICATIONS

This financial year, WSD launched a pilot scheme that involved a dedicated team and streamlined procedures to accelerate the process and approval of water supply applications for the catering industry. In the past, these applications might experience delays affecting the business of the catering industry because they were processed by the same team that also handled applications for other more complicated cases. In the light of the above, the pilot scheme created and trained a dedicated team to handle the water supply applications by the catering industry. It also featured a host of initiatives to accelerate

申請。本署並加強向持份者宣傳推廣有關計劃，同時監察專責隊伍是否能準時完成工作、其工作量和效率等。

由於先導計劃自推出後成效顯著，並得到業界正面的反饋，本署已成立了另一支類似的專責隊伍，並簡化處理其他較為簡單的供水申請的流程。

the process efficiency. In addition, WSD devoted effort to promoting the scheme to stakeholders and monitored timeliness, workload and efficiency of the dedicated team.

As the pilot scheme has been proven to be successful and effective and has received positive feedback from the trade, WSD has set up another dedicated team and similarly streamlined other types of simple water supply applications.

推出研究及發展的全新數據儲存系統

於二零一八年八月，本署研究及發展督導委員會就本署的研發工作在內聯網推出了全新數據儲存系統。此中央數據儲存系統提供一個共享工作平台，便利本署不同分科和分部的工作。同事可以閱覽、下載和搜尋系統內的所有資料數據。該系統內還有其他資訊，包括來自世界各地刊物、網站、研討會論文、報告及其他渠道整合的最佳實務方案、最新技術發展，以及其他16個水務主題的資訊。

LAUNCHING A NEW DATABASE SYSTEM ON RESEARCH AND DEVELOPMENT

In August 2018, WSD's Steering Committee on Research and Development (R&D) launched a new database system on the R&D work in WSD in our Intranet homepage. This centralised database system provides a co-working platform to facilitate the work of various Branches and Divisions in WSD. The new system is open to all colleagues to browse, download and explore all of the information within. Other information is also available in the system including good practices, technological advances and other various matters in 16 subjects pertinent to water supplies in different parts of the world, as compiled from journals, websites, conference papers and reports, and other channels.

推行知識管理

為促進知識交流，本署正推出一個知識管理平台。此平台有六個知識中心，讓員工分享工作心得和實用工具，而使用者可以輸入關鍵字搜尋所需要的檔案。此平台亦會從各類交流活動收集實用知識再作分享，例如退休資深人員的經驗之談、前線員工應對的挑戰等。

IMPLEMENTATION OF KNOWLEDGE MANAGEMENT

In addition, WSD is implementing a Knowledge Management Portal for knowledge sharing. The Portal consists of six knowledge hubs which allow colleagues to share working tips and tools, while users can input keywords to search useful documents. The Portal will also be posted with tips generated from knowledge harvesting events such as experience sharing by retirees, challenges shared by frontline colleagues and, etc.

專門的緊急維修工作

本署勇於面對困難，致力維持可靠的供水服務。於二零一八年九月，香港受到本地有史以來最猛烈的超強颱風「山竹」吹襲。早在「山竹」登陸之前，本署已啟動兩個分區緊急協調中心，以快速協調應對緊急情況，同時安排員工和承建商候命以便迅速出動。

DEDICATED EMERGENCY MAINTENANCE AND REPAIR WORKS

WSD is dedicated to braving all difficulties to maintain reliable water supply services. In September 2018, Hong Kong was hit by Super-typhoon Mangkhut, the most intense storm in Hong Kong's history. Before it landed, WSD activated two regional emergency coordination centres, which coordinated speedy responses to emergency incidents, with staff and contractors on standby for quick deployment.

在「山竹」的吹襲下，多個水務設施均受到破壞或出現停電。早在暴風訊號降至八號訊號之前，本署人員已著手展開緊急維修，以搶修供水中斷的情況，例如長洲因為塌樹令水管爆裂而影響供水。在十號颱風訊號之下，本署透過操作閥門以關閉爆裂的供水管，將長洲供水中斷的範圍及時間減低。於塔門、吉澳、鴨洲等偏遠地區，由於塌樹令道路受阻，搶修工作被迫延遲。為確保該些地區的居民可繼續獲得食水，在維修工作完成之前，本署安排了臨時供水，例如出動水船和運送水缸、樽裝水等。全賴團隊齊心協力，全港各區的供水服務在颱風過後得以迅速恢復。

Multiple waterworks facilities were damaged or suffered power outages because of Mangkhut. Well before the alert dropped to Typhoon Warning Signal No. 8, WSD staff already started to make urgent repair to resolve water supply disruptions, such as a tree-damaged pipeline in Cheung Chau affecting the water supply. By operating the valves to isolate the damaged pipes under Typhoon Warning Signal No. 10, WSD minimised the extent and duration of the water supply disruption to the island. In remote areas such as Tap Mun, Kat O and Ap Chau, repair works were delayed due to fallen trees that blocked the access. To ensure that those residents had continued access to water, WSD made arrangements for temporary water supply such as deploying water vessels, delivery of water tanks and bottled water until the repair works were completed. Through a concerted team effort, water supply to all areas of Hong Kong quickly resumed to normal soon after the typhoon.

財務及水費
Finance and Water Charges

水費

與世界其他主要城市相比，香港客戶為優質食水所繳付的費用相對低廉。除了一九九六年七月修訂的非本地船隻用水收費外，水費自一九九五年二月至今亦一直維持不變。

WATER CHARGES

Customers in Hong Kong pay less for high-quality fresh water than their counterparts in most major cities around the world. Water charges have not been revised since February 1995 (other than the charge for non-local vessels, which was last revised in July 1996).

收費幅度

住宅用戶的食水水費(沖廁用水除外)按以下四級制，以四個月為期計算：

SCALE OF CHARGES

Fresh water for domestic use (other than flushing) is charged by four-month periods, with rates set out in a four-tier system as follows.

	每單位(1立方米)收費 Charging rate per unit of one cubic metre
第一級 — 首12個單位 Tier 1 for the first 12 units	免費 Free
第二級 — 繼後的31個單位 Tier 2 for the next 31 units	$4.16 (註一)(Note 1)
第三級 — 再繼後的19個單位 Tier 3 for the next 19 units	$6.45 (註二)(Note 2)
第四級 — 餘下單位 Tier 4 for the remainder	$9.05 (註三)(Note 3)

作其他用途的食水，會根據其用途按下表所列收費：

Fresh water for other uses is charged at different rates as follows, based on the purpose of consumption.

用途 Purpose	每單位(1立方米)收費 Charging rate per unit of one cubic metre
商業 Trade	**$4.58** (註四)(Note 4)
建築 Construction	**$7.11** (註五)(Note 5)
航運(非本地船隻) Shipping (Non-local Vessels)	**$10.93** (註六)(Note 6)
航運(本地船隻) Shipping (Local Vessels)	**$4.58** (註七)(Note 7)
航運以外用途(非本地船隻)，並以預付票繳交水費 Any purpose other than Shipping (Non-local Vessels) where payment is made against a prepaid ticket	**$4.58** (註七)(Note 7)
沖廁水每四個月的收費率 Flushing per four-month period	
— 首30個單位 for the first 30 units	**免費 Free**
— 餘下單位 for the remainder	**$4.58** (註七)(Note 7)

海水沖廁費用全免。

Sea water for flushing is supplied free of charge.

註一：一九七九年推出水費分級制度時，第二級收費的目標是大致收回每單位的淨生產成本，即按照水錶記錄的耗水量計算每單位的總生產成本(包括固定資產平均淨值的目標回報率)減去每單位的差餉補貼。在其後的水費檢討，由於對所有級別實施統一加費幅度，以收回整體水務經營成本，因此第二級的建議收費並不等同於當時每單位的淨生產成本。於二零一八至一九年度，每單位的淨生產成本為11.6元，遠超4.16元的收費水平，主要因為水費自一九九五年起並無任何變動。

Note 1. When the tariff structure was introduced in 1979, the charge for the second tier was to recover approximately the net unit production cost, which meant the full unit production cost (including a target rate of return on average net fixed assets (ANFA)) less the average contribution from rates per unit, calculated based on the quantity of the metered consumption. In the subsequent tariff reviews, the proposed charging rate for the second tier was not equal to the prevailing net unit production cost because a uniform rate of increase for all tiers was adopted, taking the waterworks operating costs as a whole. In 2018-19, the net unit production cost is $11.6, which is materially higher than the charging rate of $4.16, mainly because water tariffs have not been changed since 1995.

註二：一九七九年推出水費分級制度時，第三級收費的目標是大致收回每單位的總生產成本，即按照水錶記錄的耗水量計算每單位的平均生產成本(包括固定資產平均淨值的目標回報率)。在其後的水費檢討，由於對所有級別實施統一加費幅度，以收回整體水務經營成本，因此第三級的建議收費並不等同於當時每單位的總生產成本。於二零一八至一九年度，每單位的總生產成本為16.9元，遠超6.45元的收費水平，主要因為水費自一九九五年起並無任何變動。

Note 2. When the tariff structure was introduced in 1979, the charge for the third tier was to recover approximately the full unit production cost, which meant the average production cost per unit (including a target rate of return on ANFA), calculated based on the quantity of the metered consumption. In the subsequent tariff reviews, the proposed charging rate for the third tier was not equal to the prevailing full unit production cost because a uniform rate of increase for all tiers was adopted, taking the waterworks operating costs as a whole. In 2018-19, the full unit production cost is $16.9, which is materially higher than the charging rate of $6.45, mainly because water tariffs have not been changed since 1995.

註三：第四級收費定價比第三級收費高出約40%，以阻止過量及浪費用水。

Note 3. The fourth tier is set about 40% higher than the third tier to discourage extravagant and wasteful use of water.

註四：一九九二年前，商業用途的收費與住宅用戶第二級收費相同。自一九九二年起，商業用途的收費修訂至高於住宅用戶第二級收費水平，旨在減少對非住宅用戶的補貼。

Note 4. Prior to 1992, the charging rate for trade purposes was equal to the second-tier rate for domestic purposes. Commencing from 1992, the charging rate for trade purposes was set higher than the second-tier rate for domestic purposes mainly to reduce the subsidy to non-domestic consumers.

註五：一九九二年前，建築用途的收費與住宅用戶第三級收費相同。自一九九二年起，建築用途的收費修訂至高於住宅用戶第三級收費水平，旨在減少對非住宅用戶的補貼。

Note 5. Prior to 1992, the charging rate for construction purposes was equal to the third-tier rate for domestic purposes. Commencing from 1992, the charging rate for construction purposes was set higher than the third-tier rate for domestic purposes mainly to reduce the subsidy to non-domestic consumers.

註六：航運(非本地船隻)收費於一九九六年作出修訂，當時收費水平訂為高於每單位總生產成本的40%，目的是阻止非本地船隻在香港取水。

Note 6. The charging rate for shipping (non-local vessels) was last revised in 1996. At that time, it was set at 40% above the full unit production cost to discourage the taking of water in Hong Kong.

註七：此等收費與商業用途收費相同。

Note 7. These charging rates were set at the rate equal to the charging rate for trade purposes.

水務經營帳目自一九九八年至九九年度起已錄得虧損，需依靠政府一般收入補助。二零一八至一九年度錄得虧損16.755億元，成本回收率為84.6%。政府會繼續定期檢討水費，審慎考慮各項因素，包括承擔能力、水務設施的財政表現、當時的經濟形勢，以及立法會議員的意見。

Waterworks operations have seen deficits since 1998-99, and thus are subsidised by general government revenues. In 2018-19, the deficit was $1,675.5M and the cost recovery rate was 84.6%. The Government continues to review the water tariff periodically, taking into consideration a number of factors, including affordability, financial performance of waterworks operations, the prevailing economic situation, and the views of Legislative Council members.

除水費外，《水務設施規例》(第102A章)亦列明25項法定收費項目。本署一直遵照政府的「用者自付」原則檢討這些收費項目，旨在悉數收回提供服務的成本。於二零一八至一九年度，25項法定收費項目已作調整，修訂自二零一九年三月二十九日起生效。

Other than water charges, there are 25 statutory fee items stipulated in the Waterworks Regulations (Cap. 102A). WSD periodically reviews these fee items in accordance with the Government-wide "user pays" principle, which aims to recover the full cost of providing services. During the year 2018-19, 25 statutory fee items have been revised effective from 29 March 2019.

水費收入總覽

PROFILES OF THE REVENUE FROM WATER CHARGES

於二零一八至一九年度，約14%住宅用戶毋須支付任何水費；42%達到第二級水費，需繳付每單位4.16元水費；20%需繳付第三級水費，即每單位6.45元；餘下24%需繳付第四級水費，即每單位9.05元的水費。於二零一八至一九年度，270萬住宅用戶(包括無須繳付水費之用戶)每月平均水費為47元。根據政府統計處的住戶開支統計調查，水費及排污費開支約相等於住戶每月平均開支的0.3%。

During this financial year, about 14% of domestic customers were not required to pay water charges, 42% paid up to the tier 2 rate of $4.16 per unit, 20% paid up to the tier 3 rate of $6.45 per unit, and 24% paid up to the tier 4 rate of $9.05 per unit. For WSD's 2.7 million domestic customers, the average water charge in 2018-19, including those not required to pay any charge, was $47 per month. According to the Census and Statistics Department household expenditure survey, the water and sewage charges amount to about 0.3% of the average monthly household expenditure.

過去五年按用戶類別劃分的水費收入分析如下：

An analysis of the water charges by sector over the past five years follows.

	財政年度(百萬元) Financial Year ($million)					
用戶類別 Sector	14/15	15/16	16/17	17/18	18/19	% (18/19)
商業 Trade	933	940	946	970	**974**	**33.8**
住宅 Domestic	1,474	1,503	1,518	1,552	**1,556**	**54.0**
政府 Government	155	159	156	156	**164**	**5.7**
其他# Others#	215	212	211	195	**187**	**6.5**
總收入 Total	**2,777**	**2,814**	**2,831**	**2,873**	**2,881**	**100.0**

包括沖廁用淡水
Includes fresh water for flushing

二零一八/一九年度水費收入
(按用戶類別劃分，以百分比顯示)
Water Charges (% by Sector) 2018/19

收入及開支分析

水費收入包括一般水費、各項收費、牌費，以及可收回支出的工程費用。在編製水務賬目時，會以應計賬目基準呈列財務表現及狀況，其中包括各項非現金收入項目，主要為差餉補貼、免費用水補貼及政府用水。總運作成本主要包括員工開支、購買東江水的成本、折舊、運作及行政開支。過去五年的收入及開支分析如下：

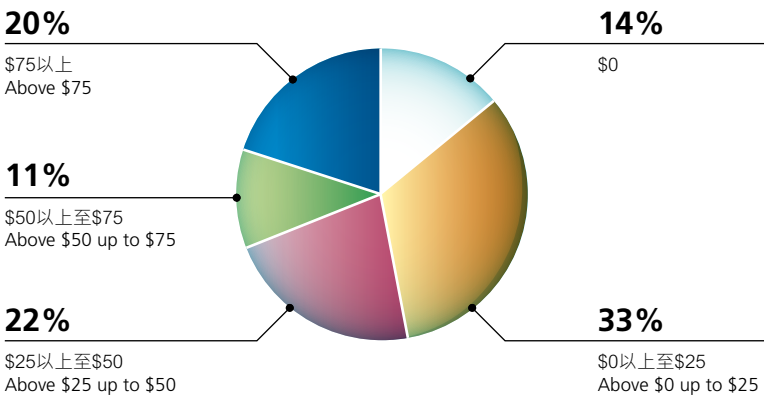
ANALYSIS OF REVENUE AND EXPENDITURE

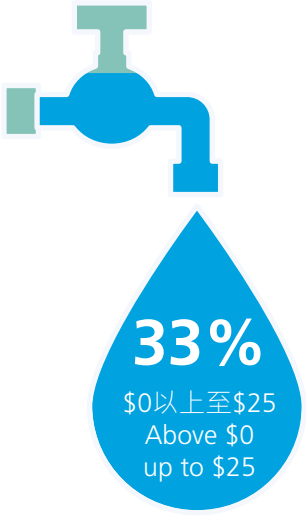
Revenue collections include chargeable water supplies, fees, licences, and reimbursable work. In preparing the Waterworks Operating Accounts which present WSD's financial results and positions on an accrual accounts basis, the revenues include non-cash items, mainly contributions from rates, contributions on free allowance, and water supplies to Government establishments. The total operating costs include mainly staff costs, Dongjiang water purchase costs, depreciation, operating and administration expenses. An analysis of the revenue and expenditure over the past five years is as follows:

收入(百萬元)
Revenue ($million)

財政年度 Financial Year	14/15	15/16	16/17	17/18	18/19
一般水費 Chargeable Supplies	2,622.0	2,654.9	2,674.9	2,716.9	**2,717.2**
差餉補貼 Contribution from Rates	4,263.4	4,574.4	4,763.2	4,942.0	**5,239.8**
免費用水補貼 Contribution on Free Allowance	961.3	1,009.2	1,067.4	1,048.6	**1,055.0**
政府用水 Supplies to Government Establishments	155.1	158.9	156.4	156.0	**163.8**
各項收費及其他 Fees, charges and others	28.9	37.1	44.5	42.6	**60.3**
總額 Total	**8,030.7**	**8,434.5**	**8,706.4**	**8,906.1**	**9,236.1**

二零一八/一九年度住宅用戶每月水費分佈圖
Distribution of Household Average Monthly Bills 2018/19





開支(百萬元)
Expenditure ($million)

財政年度 Financial Year	14/15	15/16	16/17	17/18	18/19
員工開支 Staff costs	1,586.6	1,659.2	1,729.6	1,917.1	**2,077.9**
運作及行政開支 Operating and administration expenses	1,841.0	1,918.7	1,948.7	2,024.1	**2,023.6**
購買東江水的成本 Purchase cost of Dongjiang water	4,031.2	4,296.1	4,569.7	4,782.2	**4,796.5**
折舊 Depreciation	1,583.5	1,699.1	1,815.7	1,917.1	**2,013.6**
總額 Total	**9,042.3**	**9,573.1**	**10,063.7**	**10,640.5**	**10,911.6**

本署致力以符合成本效益的方式提供服務，並在固定資產、設備、資訊科技及人力資源方面投入大量資源，藉此提高運作效益及員工生產力，務求滿足市民對更優質服務的需求。社會大眾以及我們的用戶可以放心，我們會實行嚴謹的財務紀律，在提供優質服務滿足用戶需要之餘，不忘提升成本效益。這是我們實現抱負和使命的基本法則。

WSD is committed to providing services as cost effectively as possible, and has made substantial investments in fixed assets, equipment, information technology and human resources to improve operational efficiency and staff productivity to meet the public's demand for a higher quality of services. Our customers and the public at large can rest assured that WSD will exercise strict financial discipline and be very cost conscientious in delivering quality services to meet customer demands. This is WSD's underlying approach to achieve its vision and missions.

水務 — 經營帳目
Waterworks – Operating Accounts

二零一八/一九年度回顧
REVIEW OF THE YEAR 2018-19

截至二零一九年三月三十一日止的財政年度
For the financial year ended 31 March 2019

工作方面	Activities
按照水錶記錄的淡水耗水量上升0.5%至6.69億立方米	Metered fresh water consumption increased by 0.5% to 669 million cubic metres

財務表現	Financial Performance
收入上升3.7%	Revenue increased by 3.7%
開支上升2.5%	Expenditure increased by 2.5%
稅後虧損由二零一七/一八年度的17.344億元降至二零一八/一九年度的16.755億元	Deficit after taxation decreased from $1,734.4 million in 2017-18 to $1,675.5 million in 2018-19
按固定資產平均淨值計算的回報率由二零一七/一八年度的-2.8%增至二零一八/一九年度的-2.7%	Return on Average Net Fixed Assets increased from -2.8% in 2017-18 to -2.7% in 2018-19

經營帳目
OPERATING ACCOUNT

截至二零一九年三月三十一日止的財政年度
For the financial year ended 31 March 2019

		註 Note	2019 （百萬元） $M	2018 （百萬元） $M
收入	Revenue	2	**9,236.1**	8,906.1
開支	Expenditure	3	**10,911.6**	10,640.5
稅前虧損	**Deficit before taxation**		**(1,675.5)**	(1,734.4)
稅項	Taxation	1(e), 1(f), 4		-
稅後虧損	**Deficit after taxation**	1(j)	**(1,675.5)**	(1,734.4)

附註為這帳目的一部分。The annexed notes form part of these accounts.

衡量財務表現的指標
FINANCIAL PERFORMANCE MEASURES

截至二零一九年三月三十一日止的財政年度
For the financial year ended 31 March 2019

		註 Note	2019 （百萬元） $M	2018 （百萬元） $M
固定資產平均淨值	Average net fixed assets (ANFA)	1(i), 5	**63,208.4**	61,689.4
實際回報額	Actual return		**(1,675.5)**	(1,734.4)
目標回報額	Target return		**1,643.4**	1,603.9
按固定資產平均淨值計算的實際回報率	Actual return as % of ANFA	1(h)	**(2.7%)**	(2.8%)
按固定資產平均淨值計算的目標回報率	Target return as % of ANFA		**2.6%**	2.6%

附註為這帳目的一部分。The annexed notes form part of these accounts.

財務狀況表
STATEMENT OF FINANCIAL POSITION

截至二零一九年三月三十一日止的財政年度
For the financial year ended 31 March 2019

		註 Note	2019 （百萬元） $M	2018 （百萬元） $M
可動用淨資產	**Net assets employed**			
固定資產	**Fixed assets**	1(b),1(c), 5	**63,950.0**	62,466.7
流動資產	Current assets	1(d), 6	**2,853.2**	2,789.1
流動負債	Current liabilities	7	**(2,719.5)**	(2,608.6)
流動資產淨值	Net current assets		**133.7**	180.5
			64,083.7	62,647.2
財政來源	**Financed by**			
公共資本帳目	**Public capital account**	1(j), 8	**64,083.7**	62,647.2

附註為這帳目的一部分。The annexed notes form part of these accounts.

帳目附註

1. 會計政策

(a) 會計基礎

此帳目是根據歷史成本基礎來制定，並略加修訂以包括名義的收支。

(b) 固定資產

(i) 除政府收回的土地外，固定資產不包括水務設施和集水區位處的土地。至於政府收回的土地，其收回成本已包括在有關的工程成本內。

(ii) 至於工程項目，成本包括實際直接開支，和施工期間有關設計、規劃和監督等的員工開支。

(iii) 所有其他固定資產，除了建造中的資產以成本值計算外，均以其成本值減去累積折舊列出。

(c) 折舊

(i) 折舊是根據資產成本值減去使用期末的剩餘值，採用直線攤銷法按其預計使用年期分期攤銷。每年折舊率為：

隧道、堤壩、收回土地及造林等	1%
土木工程	2%
喉管 — 淡水	2%
— 海水	5%
機電工程、機器及設備	4%-20%
水錶	8.33%
電腦硬件、軟件及系統	10%
車輛	10%-20%

(ii) 建造中的資產並沒有折舊撥備。

(d) 現有存貨

現有存貨是以加權平均法，按成本值計值。

Notes to the Accounts

1. Accounting Policies

(a) Basis of Accounting

The accounts have been prepared on the historical cost basis of accounting, modified to include notional receipts and payments.

(b) Fixed Assets

(i) No cost is included for land which is occupied by installations or sterilised by catchment areas except that, where it has been resumed, the cost of resumption has been included in the capital cost of the project concerned.

(ii) For capital projects, the costs include the actual direct expenditure and staff costs for design, planning and supervision during the construction period.

(iii) All other fixed assets are stated at cost less accumulated depreciation except assets under construction which are stated at cost.

(c) Depreciation

(i) Depreciation is provided on a straight-line basis to amortise the cost of fixed assets less residual value over their estimated useful lives. The annual rates of depreciation used are:

Tunnels, dams, resumption and afforestation, etc.	1%
Civil engineering works	2%
Water mains – fresh	2%
– salt	5%
Mechanical/electrical works, plant and machinery	4%-20%
Meters	8.33%
Computer hardware, software and system	10%
Motor vehicles	10%-20%

(ii) No depreciation is provided on assets under construction.

(d) Stocks in Hand

Stocks in Hand are valued at cost using the weighted average cost method to the extent that it is material.

(e) 稅項

名義利得稅乃按年度預期的應課溢利，以報告期末日期的現行稅率，及過往年度的應付稅項調整而作出所需要的撥備。由於這項公用事業於本年度沒有應課稅溢利，因此無需在帳目上作出名義利得稅的撥備。

(e) Taxation

Notional profits tax is provided, where necessary, based on the expected taxable surplus for the year, using the tax rates prevailing at the reporting period end date, and any adjustment to tax payable in respect of previous years. No provision for notional profits tax has been made in the accounts, as the utility has no taxable surplus for the year.

(f) 遞延稅項

遞延稅項指就資產及負債帳面值與計算應課稅溢利所用相應稅基間之所有重大暫時差額而作出的適當確認。遞延稅項資產則於應課稅溢利有可能抵銷可扣稅暫時差額時予以確認。由於這項公用事業沒有應課稅溢利可用作抵銷可扣稅暫時差額，因此無需在帳目上就所有重大暫時差額作出遞延稅項撥備。

(f) Deferred Tax

Deferred tax is recognised, where appropriate, for all material temporary differences between the tax bases of assets and liabilities and their carrying amounts in the accounts. Deferred tax assets are recognised to the extent that it is probable that taxable surplus will be available against which the temporary differences can be utilised. No provision for deferred tax in respect to all material temporary differences has been made in the accounts, as the utility has no taxable surplus against which the temporary differences can be utilised.

(g) 僱員福利

僱員福利(包括薪金、酬金、退休金、房屋津貼和年假)會被確認為對僱員當年度所提供之相關服務而列作應計開支。

(g) Employee Benefits

Employee benefits, including salaries, gratuities, pensions, housing benefits and annual leave, are accrued and recognised as an expense in the year in which the associated services are rendered by employees.

(h) 按固定資產平均淨值計算的實際回報率

按稅後溢利或虧損與固定資產平均淨值的比率計算。

(h) Actual Return on ANFA

This is calculated as a percentage of surplus/deficit after taxation to ANFA.

(i) 固定資產平均淨值

固定資產平均淨值是指總固定資產值減去累積折舊在期初及期末兩項數值的簡單平均數。

(i) Average Net Fixed Assets

The ANFA represents the simple average of the opening and closing value of total fixed assets less accumulated depreciation.

(j) 虧損

由於水務監督沒有獨立的法定身份，其財政資源或虧損均視為政府一般收入的一部分。而有關虧損亦會於這項公共資本帳目中調節。

(j) Deficit

Since the Water Authority does not have a separate legal identity, its financial resources form part of the General Revenue. All deficits are deemed to be financed by the General Revenue and adjusted to the Public Capital Account of the utility.

2. 收入 2. Revenue

		2019 （百萬元） $M	2018 （百萬元） $M
收費供水	Chargeable supplies	**2,717.2**	2,716.9
差餉補貼	Contribution from Rates	**2,574.8**	3,330.1
政府對寬免計劃的津貼	Contribution from Government on concessions	**2,665.0**	1,611.9
政府為用戶提供免費用水的津貼	Contribution from Government on free allowance to consumers	**1,055.0**	1,048.6
政府樓宇用水	Supplies to Government Establishments	**163.8**	156.0
收費、牌照及可收回支出的工程	Fees, licences and reimbursable works	**28.3**	29.2
存款利息	Interest from deposits	**32.0**	13.4
		9,236.1	8,906.1

政府對寬免計劃的津貼是為彌補於該年度因實行差餉寬免措施而引致的差額。

The Government contribution on concessions covers the shortfall in contribution from rates resulting from the concession of rates granted during the years.

政府為用戶提供免費用水津貼的計算方法，是把二零一七/一八年度及二零一八/一九年度分別為11.7元和11.6元的淡水每單位淨生產成本(已包括按固定資產平均淨值計算的目標回報額，在相關年度分別為每單位2.4元和2.5元)，乘以按照水錶記錄淡水耗用量內的免費用水津貼用量。

The calculation of Government contribution on free allowance to consumers is based on the fresh water net unit production cost of $11.7 and $11.6 for the years 2017-18 and 2018-19 respectively, which has included a target return on ANFA of $2.4 and $2.5 per unit for the respective years, multiplied by the quantity of metered fresh water consumption within the free allowance quantity.

3. 開支 3. Expenditure

		2019 （百萬元） $M	2018 （百萬元） $M
員工開支	Staff costs	**2,077.9**	1,917.1
運作及行政開支	Operating and administration expenses	**2,023.6**	2,024.1
購買東江水的成本	Dongjiang water purchase cost	**4,796.5**	4,782.2
折舊	Depreciation	**2,013.6**	1,917.1
		10,911.6	10,640.5

4. 稅項 4. Taxation

		2019 （百萬元） $M	2018 （百萬元） $M
名義利得稅	Notional profits tax charge for the year	**0.0**	0.0
以下項目的遞延稅項資產/（負債）未被確認： －未使用的稅項虧損	Deferred tax assets/(liabilities) not recognized in respect of: - Unused tax loss	**40,285.2**	37,367.5
由折舊免稅額所產生的重大暫時差異	Material temporary difference arising from depreciation allowances	**(24,987.6)**	(23,751.0)

5. 固定資產

5. Fixed Assets

		樓宇、過濾器、喉管等 Buildings, Filters, Mains, etc.	機器及設備 Plant and Machinery	電腦硬件、軟件及系統 Computer Hardware, Software & System	海水沖廁設施 Salt Water Flushing	船灣淡水湖 Plover Cove	萬宜水庫 High Island	水錶 Meters	車輛 Motor Vehicles	建造中的資產 Assets Under Construction	總額 Total
		（百萬元）$M	（百萬元）$M	（百萬元）$M	（百萬元）$M	（百萬元）$M	（百萬元）$M	（百萬元）$M	（百萬元）$M	（百萬元）$M	（百萬元）$M
成本	**Cost**										
二零一八年四月一日	At 1 April 2018	60,656.4	367.5	410.2	14,082.9	702.0	1,661.2	522.2	104.0	9,168.8	**87,675.2**
添置	Additions	-	15.2	3.2	-	-	-	-	3.1	3,505.3	**3,526.8**
轉發	Transfers	5,845.4	-	7.2	272.1	-	-	-	7.3	(6,132.0)	
處置/註銷	Disposals/Write off	(11.4)	(88.3)	(1.8)	(4.3)	-	-	(17.7)	(13.4)	(25.3)	**(162.2)**
二零一九年三月三十一日	At 31 March 2019	66,490.4	294.4	418.8	14,350.7	702.0	1,661.2	504.5	101.0	6,516.8	**91,039.8**
累積折舊	**Accumulated Depreciation**										
二零一八年四月一日	At 1 April 2018	17,429.0	274.1	338.1	5,208.4	457.9	1,188.2	264.7	48.1	-	**25,208.5**
該年折舊	Charge for the year	1,325.8	20.8	13.7	563.8	9.3	28.8	41.9	9.5	-	**2,013.6**
處置/註銷後轉回	Written back on Disposals/Write off	(8.4)	(88.1)	(1.4)	(4.3)	-	-	(17.7)	(12.4)	-	**(132.3)**
二零一九年三月三十一日	**At 31 March 2019**	18,746.4	206.8	350.4	5,767.9	467.2	1,217.0	288.9	45.2	-	**27,089.8**
帳面淨值	**Net Book Value**										
二零一九年三月三十一日	**At 31 March 2019**	47,744.0	87.6	68.4	8,582.8	234.8	444.2	215.6	55.8	6,516.8	**63,950.0**
二零一八年三月三十一日	At 31 March 2018	43,227.4	93.4	72.1	8,874.5	244.1	473.0	257.5	55.9	9,168.8	**62,466.7**

帳目不包括(i)搬遷食水及海水配水庫往岩洞的(a)可行性研究及(b)勘查研究、設計及工地勘測，及(ii)搬遷旺角辦事處至天水圍所涉及的資本開支。

The capital expenditure relating to the (i) (a) feasibility study and (b) investigation study, design and site investigation for the relocation of fresh water and salt water service reservoirs into caverns and (ii) relocation of Mongkok office to Tin Shui Wai have been excluded.

6. 流動資產

6. Current Assets

		2019 （百萬元） $M	2018 （百萬元） $M
現有存貨	Stocks in Hand	**137.7**	133.4
應收帳項	Debtors	**481.0**	492.4
與庫務署的往來帳	Current Account with Treasury	**2,234.5**	2,163.3
		2,853.2	2,789.1

7. 流動負債

7. Current Liabilities

		2019 （百萬元） $M	2018 （百萬元） $M
用戶和承建商的按金	Consumers' and contractors' deposits	**2,224.4**	2,153.2
應付帳項	Creditors	**495.1**	455.4
		2,719.5	2,608.6

8. 公共資本帳目

公共資本帳目指政府在這項公用事業的投資。

8. Public Capital Account

The Public Capital Account represents the Government's investment in this utility.

		2019 （百萬元） $M	2018 （百萬元） $M
四月一日結餘	Balance as of 1 April	**62,647.2**	61,094.8
本年度的虧損	Deficit for the year	**(1,675.5)**	(1,734.4)
政府的額外現金投資	Additional cash investment by the Government	**3,112.0**	3,286.8
三月三十一日結餘	Balance as at 31 March	**64,083.7**	62,647.2

9. 承擔

於二零一九年三月三十一日及二零一八年三月三十一日，未於經營帳目作出撥備的未償還承擔如下：

9. Commitments

Outstanding commitments as of 31 March 2019 and 31 March 2018 not provided for in the operating accounts are as follows:

		2019 （百萬元） $M	2018 （百萬元） $M
(i) 基本工程項目、物業、機器及設備、以及非經常資助金	(i) Capital works projects, property, plant and equipment, and capital subvention	**11,983.5**	10,910.5
(ii) 非經常性開支	(ii) Non-recurrent expenditure		-
(iii) 投資	(iii) Investments		-
(iv) 貸款及非經常性撥款補助金	(iv) Loans and non-recurrent grants		-
三月三十一日結餘	Balance as of 31 March	**11,983.5**	10,910.5

財政年度：由每年四月一日起至翌年三月三十一日止

Financial Year: April 1 to March 31

年份：由每年一月一日起至十二月三十一日止

Year (Calendar Year): January 1 to December 31

匯率

除另有說明外，本年報所用「元」均指港元。自一九八三年十月十七日起，政府透過一項有關發行紙幣的措施，將港元與美元聯繫，以7.8港元兑1美元為固定匯率。

Exchange Rates

When dollars are quoted in this report, they are, unless otherwise stated, Hong Kong dollars. Since October 17, 1983, the Hong Kong dollar has been linked to the US dollar, through an arrangement in the note-issue mechanism, at a fixed rate of HK$7.80 = US$1.

數據一覽
Data Summary

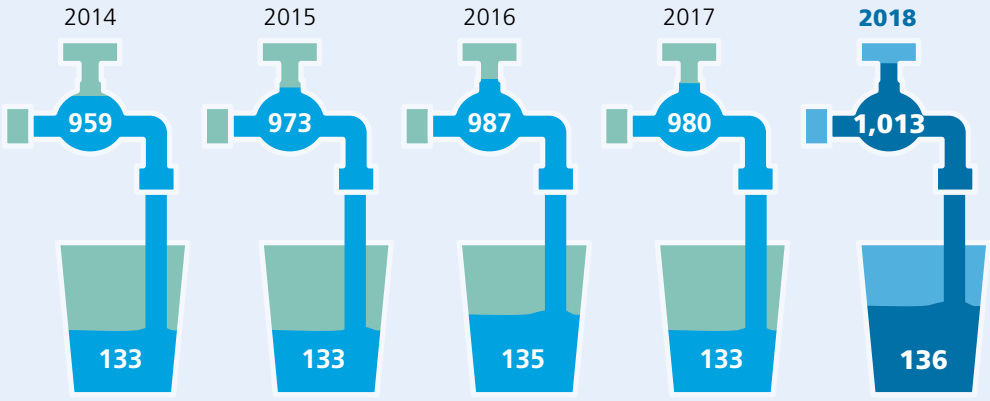
全年食水用量及人均用水量*
Annual Fresh Water Consumption and Per Capita Consumption*

全年食水用量
Annual Fresh Water Consumption

（百萬立方米 million m^3）

人均用水量
Per Capita Consumption

（立方米 / 每年 m^3 per year）



全港人口及獲食水供應人口
Population in Hong Kong and Population Served with Fresh Water

	2014	2015	2016	2017	**2018**
全港人口* Population in Hong Kong* （百萬 million）	**7.24**	**7.31**	**7.34**	**7.39**	**7.45**
獲食水供應人口 Population Served with Fresh Water （百萬 million）	**7.23**	**7.30**	**7.34#**	**7.39#**	**7.45#**

* 根據政府統計處公佈的年中人口數字。
Based on the mid-year population figures released by the Census and Statistics Department.

\# 全港超過99.9%人口獲食水供應。
Over 99.9% of the population in Hong Kong is served with fresh water.

全年海水用量及獲海水供應人口
Annual Salt Water Consumption and Population Served with Salt Water

	2014	2015	2016	2017	**2018**
全年海水用量 Annual Salt Water Consumption （百萬立方米 million m^3）	**271**	**272**	**260**	**278**	**279**
獲海水供應人口 Population Served with Salt Water （百萬 million）	**5.78**	**5.85**	**6.14**	**6.22**	**6.27**

二零一八年四月至二零一九年三月的食水水質
Drinking Water Quality for the Period of April 2018 - March 2019

注意事項：
Points to Note:

- 水務署已採用世界衞生組織在二零一一年制定之《飲用水水質準則》(第四版)中的相關準則值/暫定準則值世衛準則，作為香港食水標準。
- 所有食水樣本均從濾水廠、配水庫、供水接駁點和公眾可達的客戶水龍頭抽取。
- 這時段內抽取的食水樣本的測試結果完全符合香港食水標準。

- WSD has adopted the corresponding guideline values (GVs) / provisional guideline values (PGVs) in the fourth edition of the World Health Organization's Guidelines for Drinking-water Quality (WHO Guidelines), published in 2011 as the Hong Kong Drinking Water Standards (HKDWS).
- Drinking water samples were taken at water treatment works, service reservoirs, connection points and publicly accessible consumers' taps.
- The testing results of the drinking water samples taken during this period fully complied with the HKDWS.

甲部：微生物項目
Part A: Microbiological parameters

項目 Parameter	單位 Unit	監測結果 Monitoring Data (04/2018 - 03/2019) 最低值 Minimum	最高值 Maximum	平均值 Average	香港食水標準 HKDWS	達標 Compliance
埃希氏大腸桿菌 E. coli	菌落數/100毫升 cfu* per 100 mL	0	0	0	0	√
總大腸桿菌群(註釋一) Total Coliforms (Note 1)	菌落數/100毫升 cfu* per 100 mL	0	0	0	-	-
隱孢子蟲(註釋二) Cryptosporidium (Note 2)	卵囊數量/公升 no. of oocyst per L	0.00	0.00	0.00	-	-
賈第蟲(註釋二) Giardia (Note 2)	孢囊數量/公升 no. of cyst per L	0.00	0.00	0.00	-	-

* Colony forming unit (cfu)

註釋：

(1) 雖然香港食水標準沒有為總大腸桿菌群制訂標準值，但本署仍然會監測食水中的總大腸桿菌群含量。

(2) 雖然香港食水標準沒有為隱孢子蟲或賈第蟲制訂標準值，但本署仍然會監測食水中的隱孢子蟲及賈第蟲含量。每公升0.00的監測結果代表在不少於100公升的食水樣本中，檢測不到卵囊或孢囊。

Note:

(1) Although the HKDWS does not have a standard value for Total Coliforms, WSD also monitors Total Coliforms in drinking water.

(2) Although the HKDWS does not have a standard value for Cryptosporidium or Giardia, WSD also monitors Cryptosporidium and Giardia in drinking water. The monitoring data of 0.00 oocyst/cyst per litre represents no oocyst or cyst detected in the drinking water sample of volume not less than 100 litres.

乙部：化學項目
Part B: Chemical parameters

項目 Parameter	單位 Unit	監測結果 Monitoring Data (04/2018 - 03/2019) 最低值 Minimum	最高值 Maximum	平均值 Average	香港食水標準 HKDWS	達標 Compliance
丙烯酰胺 Acrylamide	微克／公升 µg/L	< 0.4	< 0.4	< 0.4	≤ 0.5	√
草不綠 Alachlor	微克／公升 µg/L	< 5.0	< 5.0	< 5.0	≤ 20	√
涕滅威 Aldicarb	微克／公升 µg/L	< 2.5	< 2.5	< 2.5	≤ 10	√
艾氏劑和異艾氏劑 Aldrin and Dieldrin	微克／公升 µg/L	< 0.008	< 0.008	< 0.008	≤ 0.03	√
銻 Antimony	毫克／公升 mg/L	< 0.001	< 0.001	< 0.001	≤ 0.02	√
砷 Arsenic	毫克／公升 mg/L	< 0.001	< 0.001	< 0.001	≤ 0.01	√
莠去津和其氯均三嗪代謝物 Atrazine and its chloro-s-triazine metabolites	微克／公升 µg/L	< 25	< 25	< 25	≤ 100	√
鋇 Barium	毫克／公升 mg/L	0.003	0.022	0.014	≤ 0.7	√
苯 Benzene	微克／公升 µg/L	< 2.5	< 2.5	< 2.5	≤ 10	√
苯并(a)芘 Benzo (a) pyrene	微克／公升 µg/L	< 0.0020	< 0.0020	< 0.0020	≤ 0.7	√
硼 Boron	毫克／公升 mg/L	< 0.02	0.07	0.03	≤ 2.4	√
溴酸鹽 Bromate	微克／公升 µg/L	< 2.5	< 2.5	< 2.5	≤ 10	√
一溴二氯甲烷 Bromodichloromethane	微克／公升 µg/L	< 15	< 15	< 15	≤ 60	√
溴仿 Bromoform	微克／公升 µg/L	< 25	< 25	< 25	≤ 100	√
鎘 Cadmium	毫克／公升 mg/L	< 0.001	< 0.001	< 0.001	≤ 0.003	√
呋喃丹 Carbofuran	微克／公升 µg/L	< 1.2	< 1.2	< 1.2	≤ 7	√

項目 Parameter	單位 Unit	監測結果 Monitoring Data (04/2018 - 03/2019)			香港食水標準 HKDWS	達標 Compliance
		最低值 Minimum	最高值 Maximum	平均值 Average		
四氯化碳 Carbon tetrachloride	微克／公升 µg/L	< 0.50	< 0.50	< 0.50	≤ 4	√
氯酸鹽 Chlorate	微克／公升 µg/L	< 25	73	< 25	≤ 700	√
氯丹 Chlordane	微克／公升 µg/L	< 0.050	< 0.050	< 0.050	≤ 0.2	√
氯 Chlorine	毫克／公升 mg/L	< 0.1	1.6	0.7	≤ 5	√
亞氯酸鹽 Chlorite	微克／公升 µg/L	< 25	< 25	< 25	≤ 700	√
氯仿 Chloroform	微克／公升 µg/L	< 50	< 50	< 50	≤ 300	√
綠麥隆 Chlorotoluron	微克／公升 µg/L	< 7.5	< 7.5	< 7.5	≤ 30	√
毒死蜱 Chlorpyrifos	微克／公升 µg/L	< 7.5	< 7.5	< 7.5	≤ 30	√
鉻 Chromium	毫克／公升 mg/L	< 0.001	0.001	< 0.001	≤ 0.05	√
銅 Copper	毫克／公升 mg/L	< 0.003	0.093	< 0.003	≤ 2	√
青乙酰肼 Cyanazine	微克／公升 µg/L	< 0.15	< 0.15	< 0.15	≤ 0.6	√
2,4-滴 2,4-D (or 2,4-dichlorophe-noxyacetic acid)	微克／公升 µg/L	< 7.5	< 7.5	< 7.5	≤ 30	√
丁基-2,4二氯酚羟基醋酸 2,4-DB (or 4-(2,4-dichloro-phenoxy) butyric acid)	微克／公升 µg/L	< 22	< 22	< 22	≤ 90	√
滴滴涕和代謝物 DDT and metabolites	微克／公升 µg/L	< 0.50	< 0.50	< 0.50	≤ 1	√
二(2-乙基己基)鄰苯二甲酸鹽 Di (2-ethylhexyl) phthalate	微克／公升 µg/L	< 2	< 2	< 2	≤ 8	√
二溴乙腈 Dibromoacetonitrile	微克／公升 µg/L	< 0.5	0.9	< 0.5	≤ 70	√

項目 Parameter	單位 Unit	監測結果 Monitoring Data (04/2018 - 03/2019)			香港食水標準 HKDWS	達標 Compliance
		最低值 Minimum	最高值 Maximum	平均值 Average		
二溴一氯甲烷 Dibromochloromethane	微克/公升 µg/L	< 25	< 25	< 25	≤ 100	√
1,2-二溴-3-氯丙烷 1,2-Dibromo-3-chloropropane	微克/公升 µg/L	< 0.25	< 0.25	< 0.25	≤ 1	√
1,2-二溴乙烷 1,2-Dibromoethane	微克/公升 µg/L	< 0.10	< 0.10	< 0.10	≤ 0.4	√
二氯乙酸鹽 Dichloroacetate	微克/公升 µg/L	< 12	16	< 12	≤ 50	√
二氯乙腈 Dichloroacetonitrile	微克/公升 µg/L	< 2.5	3.8	< 2.5	≤ 20	√
1,2-二氯苯 1,2-Dichlorobenzene	微克/公升 µg/L	< 250	< 250	< 250	≤ 1000	√
1,4-二氯苯 1,4-Dichlorobenzene	微克/公升 µg/L	< 75	< 75	< 75	≤ 300	√
1,2-二氯乙烷 1,2-Dichloroethane	微克/公升 µg/L	< 7.5	< 7.5	< 7.5	≤ 30	√
1,2-二氯乙烯 1,2-Dichloroethene	微克/公升 µg/L	< 12	< 12	< 12	≤ 50	√
二氯甲烷 Dichloromethane	微克/公升 µg/L	< 5.0	< 5.0	< 5.0	≤ 20	√
1,2-二氯丙烷 1,2-Dichloropropane	微克/公升 µg/L	< 5.0	< 5.0	< 5.0	≤ 40	√
1,3-二氯丙烯 1,3-Dichloropropene	微克/公升 µg/L	< 5.0	< 5.0	< 5.0	≤ 20	√
2,4-滴丙酸 Dichlorprop (or 2,4-DP)	微克/公升 µg/L	< 25	< 25	< 25	≤ 100	√
樂果 Dimethoate	微克/公升 µg/L	< 1.5	< 1.5	< 1.5	≤ 6	√
1,4-二噁烷 1,4-Dioxane	微克/公升 µg/L	< 12.5	< 12.5	< 12.5	≤ 50	√
乙二胺四乙酸 Edetic acid (EDTA)	微克/公升 µg/L	< 50	< 50	< 50	≤ 600	√
異狄氏劑 Endrin	微克/公升 µg/L	< 0.15	< 0.15	< 0.15	≤ 0.6	√

項目 Parameter	單位 Unit	監測結果 Monitoring Data (04/2018 - 03/2019)			香港食水標準 HKDWS	達標 Compliance
		最低值 Minimum	最高值 Maximum	平均值 Average		
表氯醇 Epichlorohydrin	微克/公升 µg/L	< 0.4	< 0.4	< 0.4	≤ 0.4	√
乙苯 Ethylbenzene	微克/公升 µg/L	< 75	< 75	< 75	≤ 300	√
2,4,5-涕丙酸 Fenoprop (or 2,4,5-TP)	微克/公升 µg/L	< 2.2	< 2.2	< 2.2	≤ 9	√
氟化物 Fluoride	毫克/公升 mg/L	0.20	0.62	0.48	≤ 1.5	√
六氯丁二烯 Hexachlorobutadiene	微克/公升 µg/L	< 0.15	< 0.15	< 0.15	≤ 0.6	√
羥基化莠去津 Hydroxyatrazine	微克/公升 µg/L	< 50	< 50	< 50	≤ 200	√
異丙隆 Isoproturon	微克/公升 µg/L	< 2.2	< 2.2	< 2.2	≤ 9	√
鉛 Lead	毫克/公升 mg/L	< 0.001	< 0.001	< 0.001	≤ 0.01	√
林丹 Lindane	微克/公升 µg/L	< 0.50	< 0.50	< 0.50	≤ 2	√
2-甲基-4-氯苯氧基乙酸 MCPA (or (2-methyl-4-chlorophenoxy)acetic acid)	微克/公升 µg/L	< 2.0	< 2.0	< 2.0	≤ 2	√
2-甲基-4-氯丙酸 Mecoprop (or MCPP)	微克/公升 µg/L	< 2.5	< 2.5	< 2.5	≤ 10	√
汞 Mercury	毫克/公升 mg/L	< 0.00005	< 0.00005	< 0.00005	≤ 0.006	√
甲氧滴滴涕 Methoxychlor	微克/公升 µg/L	< 5.0	< 5.0	< 5.0	≤ 20	√
甲氧毒草安 Metolachlor	微克/公升 µg/L	< 2.5	< 2.5	< 2.5	≤ 10	√
微囊藻毒素-LR(總) Microcystin-LR (total)	微克/公升 µg/L	< 0.5	< 0.5	< 0.5	≤ 1	√
禾草特 Molinate	微克/公升 µg/L	< 1.5	< 1.5	< 1.5	≤ 6	√
一氯胺 Monochloramine	毫克/公升 mg/L	< 1.0	< 1.0	< 1.0	≤ 3	√

項目 Parameter	單位 Unit	監測結果 Monitoring Data (04/2018 - 03/2019)			香港食水標準 HKDWS	達標 Compliance
		最低值 Minimum	最高值 Maximum	平均值 Average		
一氯醋酸鹽 Monochloroacetate	微克/公升 µg/L	< 10	< 10	< 10	≤ 20	√
鎳 Nickel	毫克/公升 mg/L	< 0.001	0.010	0.002	≤ 0.07	√
硝酸鹽(以NO_3-計) Nitrate (as NO_3-)	毫克/公升 mg/L	< 2.5	15	4.8	≤ 50	√
次氨基三乙酸 Nitrilotriacetic acid	微克/公升 µg/L	< 50	< 50	< 50	≤ 200	√
亞硝酸鹽(以NO_2-計) Nitrite (as NO_2-)	毫克/公升 mg/L	< 0.004	0.013	< 0.004	≤ 3	√
N-亞硝基二甲胺 N-Nitrosodimethylamine	微克/公升 µg/L	< 0.025	< 0.025	< 0.025	≤ 0.1	√
二甲戊樂靈 Pendimethalin	微克/公升 µg/L	< 5.0	< 5.0	< 5.0	≤ 20	√
五氯酚 Pentachlorophenol	微克/公升 µg/L	< 2.2	< 2.2	< 2.2	≤ 9	√
硒 Selenium	毫克/公升 mg/L	< 0.003	< 0.003	< 0.003	≤ 0.04	√
西瑪三嗪 Simazine	微克/公升 µg/L	< 0.50	< 0.50	< 0.50	≤ 2	√
二氯異氰尿酸鈉(以氰尿酸計) Sodium dichloroisocyanurate (as cyanuric acid)	毫克/公升 mg/L	< 10	< 10	< 10	≤ 40	√
苯乙烯 Styrene	微克/公升 µg/L	< 5.0	< 5.0	< 5.0	≤ 20	√
2,4,5-涕 2,4,5-T (or 2,4,5-trichlorophenoxy acetic acid)	微克/公升 µg/L	< 2.2	< 2.2	< 2.2	≤ 9	√
特丁律 Terbuthylazine	微克/公升 µg/L	< 1.8	< 1.8	< 1.8	≤ 7	√
四氯乙烯 Tetrachloroethene	微克/公升 µg/L	< 10	< 10	< 10	≤ 40	√
甲苯 Toluene	微克/公升 µg/L	< 175	< 175	< 175	≤ 700	√
三氯乙酸鹽 Trichloroacetate	微克/公升 µg/L	< 25	< 25	< 25	≤ 200	√

項目 Parameter	單位 Unit	監測結果 Monitoring Data (04/2018 - 03/2019) 最低值 Minimum	最高值 Maximum	平均值 Average	香港食水標準 HKDWS	達標 Compliance
三氯乙烯 Trichloroethene	微克／公升 µg/L	< 18	< 18	< 18	≤ 20	√
2,4,6-三氯酚 2,4,6-Trichlorophenol	微克／公升 µg/L	< 50	< 50	< 50	≤ 200	√
氟樂靈 Trifluralin	微克／公升 µg/L	< 5.0	< 5.0	< 5.0	≤ 20	√
鈾 Uranium	毫克／公升 mg/L	< 0.0002	0.0004	< 0.0002	≤ 0.03	√
氯乙烯 Vinyl chloride	微克／公升 µg/L	< 0.2	< 0.2	< 0.2	≤ 0.3	√
二甲苯 Xylenes	微克／公升 µg/L	< 125	< 125	< 125	≤ 500	√

註釋：

以上的統計數字並不包括本署自二零一七年十二月起展開的水質監測優化計劃（優化監測計劃）所收集的數據。該計劃於全港隨機抽出客戶，從他們的水龍頭收集食水樣本，檢測有可能在內部供水系統出現的六種金屬，即銻、鎘、鉻、銅、鉛和鎳，以監測客戶水龍頭的食水水質。相關監測數據的統計數字每周於本署優化監測計劃的網頁（www.wsd.gov.hk/tc/dwsewqmp）內公布。

Note:

The above statistics do not include the data collected under the Enhanced Water Quality Monitoring Programme (Enhanced Programme) launched by WSD since December 2017. This programme takes water samples from the taps of consumers randomly selected over the territory for testing of six metals, namely antimony, cadmium, chromium, copper, lead and nickel, which could be present in an internal plumbing system, to monitor the relevant quality of drinking water at the consumers' taps. The statistics of the concerned monitoring data are published on WSD's website (www.wsd.gov.hk/en/dwsewqmp) for the Enhanced Programme on a weekly basis.

丙部：輻射項目
Part C: Radiological parameters

項目 Parameter	單位 Unit	監測結果 Monitoring Data (04/2018 - 03/2019) 最低值 Minimum	最高值 Maximum	平均值 Average	香港食水標準篩查水平（註釋一）HKDWS Screening Level (Note 1)	低於篩查水平 Below Screening Level
總 α 活度 Gross alpha activity	貝可／公升 Bq/L	< 0.1	< 0.1	< 0.1	< 0.5	√
總 β 活度 Gross beta activity	貝可／公升 Bq/L	< 0.2	< 0.2	< 0.2	< 1.0	√

註釋：

(1) 食水中的總 α 及總 β 活度的輻射篩查水平分別為每公升0.5貝可和每公升1.0貝可。若食水中的有關放射性活度低於篩查水平，則無需調查或詳細分析個別放射性核素。

Note:

(1) The screening levels for radiation in drinking water for gross alpha activity and gross beta activity are 0.5 Bq/L and 1.0 Bq/L respectively, below which no further investigation or detailed analysis for specific radionuclides is required.

丁部：其他項目
Part D: Other parameters

項目 Parameter	單位 Unit	監測結果 Monitoring Data (04/2018 - 03/2019)		
		最低值 Minimum	最高值 Maximum	平均值 Average
pH值(水溫25°C時) pH at 25 °C	pH	6.9	9.1	8.4
色度 Colour	Hazen unit	< 5	< 5	< 5
混濁度 Turbidity	NTU	< 0.1	2.9	0.3
導電率(水溫25°C時) Conductivity at 25 °C	μS/cm	58	229	145
溫度 Temperature	℃	14.0	33.6	24.6
總鹼度(以$CaCO_3$計) Total alkalinity (as $CaCO_3$)	毫克/公升 mg/L	7	76	25
總硬度(以$CaCO_3$計) Total hardness (as $CaCO_3$)	毫克/公升 mg/L	6	71	38
鈣 Calcium	毫克/公升 mg/L	0.9	21	12
鎂 Magnesium	毫克/公升 mg/L	0.38	2.4	1.5
氯化物 Chloride	毫克/公升 mg/L	< 5	18	10
硫酸鹽 Sulphate	毫克/公升 mg/L	5	24	14
正磷酸鹽(以PO_4計) Ortho-phosphates (as PO_4)	毫克/公升 mg/L	< 0.01	0.02	< 0.01
鐵 Iron	毫克/公升 mg/L	< 0.01	0.05	< 0.01
鋁 Aluminium	毫克/公升 mg/L	< 0.01	0.26	0.03
二氧化硅(以SiO_2計) Silica (as SiO_2)	毫克/公升 mg/L	1.1	18	9.5
錳 Manganese	毫克/公升 mg/L	< 0.01	0.03	< 0.01

註釋：

以上項目量度香港食水的一般物理和化學特性。香港食水標準並不包括這些項目，因此沒有以上項目的標準值。

Note:

The above parameters relate to the general physical and chemical properties of drinking water in Hong Kong. The HKDWS does not include these parameters and hence there are no standard values for them.

附錄
Appendices

附錄一
Appendix I

客戶諮詢中心

香港區

灣仔客戶諮詢中心
灣仔告士打道7號入境事務大樓1樓

九龍區

大角咀客戶諮詢中心
大角咀鐵樹街41號地下

新界區

大埔客戶諮詢中心
大埔汀角路1號大埔政府合署4樓

沙田客戶諮詢中心
沙田上禾輋路1號沙田政府合署3樓

屯門客戶諮詢中心
屯門屯喜路1號屯門政府合署7樓

CUSTOMER ENQUIRY CENTRES

Hong Kong

Wan Chai Customer Enquiry Centre
1/F, Immigration Tower, 7 Gloucester Road, Wan Chai

Kowloon

Tai Kok Tsui Customer Enquiry Centre
G/F, 41 Tit Shu Street, Tai Kok Tsui

New Territories

Tai Po Customer Enquiry Centre
4/F, Tai Po Government Offices, 1 Ting Kok Road, Tai Po

Sha Tin Customer Enquiry Centre
3/F, Sha Tin Government Offices, 1 Sheung Wo Che Road, Sha Tin

Tuen Mun Customer Enquiry Centre
7/F, Tuen Mun Government Offices, 1 Tuen Hi Road, Tuen Mun

附錄二
Appendix II

客戶查詢及申請服務的統計數字
Statistics on Customer Enquiries and Requests for Service

個案數目 Number of Enquiries and Requests	年份 Year				
	2014	2015	2016	2017	2018
書面 Letter	205,630	215,428	225,097	247,665	**259,039**
電話 Telephone	850,050	833,284	842,414	847,330	**860,650**
親身 Counter	317,851	253,698	290,368	335,271	**329,551**
總數 Total	**1,373,531**	**1,302,410**	**1,357,879**	**1,430,266**	**1,449,240**

附錄三
Appendix III

客戶投訴的統計數字
Statistics on Customer Complaints

投訴數目 Number of Complaints	年份 Year				
	2014	2015	2016	2017	2018
與帳戶有關的投訴# Account-Related#	149	140	142	145	**138**
與帳戶無關的投訴 Non-Account-Related	7,390	7,787	7,767	7,498	**6,454**
總數 Total	**7,539**	**7,927**	**7,909**	**7,643**	**6,592**

* 與帳戶有關的投訴由區議會、立法會及申訴專員轉介。
Account-related complaints from District Councils, LegCo and The Ombudsman.

附錄四
Appendix IV

二零一八至一九年度繳費方式的統計數字
Statistics on Mode of Payment 2018/19

繳費方式 Mode of Payment	交易數目 No. of Cases	百分比 Percentage (%)
親身繳費 In person	**3,899,400**	50.2
郵寄 By post	**69,600**	0.9
自動轉帳 Autopay	**903,500**	11.6
繳費靈 Payment by Phone Service (PPS)	**703,200**	9.1
自動櫃員機 ATM	**348,700**	4.5
網上繳費 Internet	**1,838,800**	23.7
總數 Total	**7,763,200**	**100.0**

水務署
WATER SUPPLIES DEPARTMENT

香港灣仔告士打道七號入境事務大樓四十八樓
電話：(852) 2824 5000
傳真：(852) 2824 0578
電子郵件：wsdinfo@wsd.gov.hk
互聯網地址：http://www.wsd.gov.hk

48/F Immigration Tower, 7 Gloucester Road, Wan Chai, Hong Kong.
Telephone：(852) 2824 5000
Facsimile：(852) 2824 0578
E-mail：wsdinfo@wsd.gov.hk
Website address：http://www.wsd.gov.hk