

署長的話

Director's Statement

持續提升本港食水安全和供水保障是水務署莊嚴的責任和義務。通過與專業人士、專家和各業界合作，加強宣傳和持份者的參與，水務署一直以多管齊下的方針，滿足客戶對優質供水服務的需求。

We at WSD have a solemn duty and obligation to continually enhance the quality of water supply services in terms of both water safety and water security. Working together with professionals and experts as well as cooperating with various industry associations and through enhanced publicity and stakeholder engagement, WSD has been implementing a multi-pronged approach with a mission to excel in satisfying customers' needs for provision of quality water services.



林天星工程師，太平紳士
Ir LAM Tin Sing, Enoch, JP

水務署署長
Director of Water Supplies





加強供水保障

由二零零八年起，本署推出全面水資源管理策略，以全方位管理水資源，維持供水和用水需求之間的最佳平衡，達致可持續使用水資源的目標，並為香港做好準備以應對日後全球氣候變化帶來的不明朗因素。這一策略主要著眼於通過推廣節約用水以節制本地用水需求的增長，以及開發新的水資源。全面水資源管理策略推出以來，已為本地的供水保障和可靠性作出重大貢獻。

建基於我們迄今取得的成功，我們將繼續落實全面水資源管理策略的措施，並計劃於二零一八年前完成全面檢討工作，以期更新全面水資源管理策略，更充份地裝備自己以應對各種不明朗因素和挑戰。

節約用水

本署一直採取多管齊下的方法，推廣住宅和非住宅的節水措施，同時採用有效的硬件及軟件策略。

Enhancing Water Security

Since 2008, we have promulgated the Total Water Management (TWM) Strategy in order to manage all aspects of water resources to achieve an optimal balance between water supply and demand for sustainable use of water resources and to better prepare the Territory for future uncertainties resulting from global climate change. This strategy focuses primarily on curbing the growth of local water demand through promoting water conservation and exploiting new water resources. Since its inception, the TWM has made good contribution towards water security and reliability for the Territory.

Building on successes we have achieved to date, we will continue implementing the initiatives under the TWM strategy and have embarked on a comprehensive review for completion by 2018 with a view to updating the TWM strategy for strengthening our resilience while staying fully prepared against any uncertainties and challenges.

Water Conservation

Our Department has been adopting a multi-pronged approach that promotes water conservation in both the domestic and non-domestic sectors while applying both effective hardware and software strategies.

在教育及宣傳工作方面，水務署於二零一五／一六學年在小學推出「惜水學堂」節約用水教育計劃，以加深學生對水資源、節約用水和水資源可持續性的認識，以應對氣候變化的影響。乘着「惜水學堂」取得的成功，我們將在二零一七／一八學年在幼稚園推行先導教育計劃。

此外，我們亦於二零一六年十一月假香港理工大學舉辦「節約用水週2016」。一系列向市民推廣節約用水的活動深受歡迎，吸引了超過二萬人參與其中。這項為期一周的特別活動旨在向包括教育界、餐飲和酒店業以及環保團體在內的各個社區界別推廣節約用水，並幫助公眾了解氣候變化給水資源帶來的挑戰。

With respect to education and promotional schemes, WSD has launched the “Cherish Water Campus” integrated education programme for primary schools since the 2015/16 school year in order to broaden students’ knowledge about water resources and raise their awareness of water conservation while deepening their appreciation of water sustainability in order to address the effects of climate change. Riding on the success of “Cherish Water Campus”, we will launch a pilot education programme for kindergarten students in the 2017/18 school year.

On the other hand, Water Conservation Week 2016, a programme of publicity and outreach activities about water conservation held at the Hong Kong Polytechnic University in November 2016 was well received, attracting more than 20,000 visitors. The aim of this special week-long event was to promote water conservation in various community sectors including education, catering and hotel industries, and environmental sectors and to aid public understanding of the challenges brought about by climate change on water resources.



本署副署長黃仲良先生與一眾「點滴傳承－邁步向前」水資源研討會嘉賓合照。
A group photo of the Deputy Director of Water Supplies, Mr WONG Chung-leung together with other guests of the “Water Resources Sustainability – Marching On” Seminar.

新的供水來源

在全面水資源管理策略及其現行措施的推動下，水務署正建立一個由本地集水、輸入東江水、海水沖廁、海水化淡、再造水、中水重用及雨水回收組成的多源供水結構。這六個供水來源將共同構成本港未來的供水支柱，令本港水資源更為安全、可靠及穩健。建立這些新供水來源的工作進展良好。

海水化淡

我們一直都有留意海水化淡技術方面的最新發展。分別於二零零二年及二零零七年完成的可行性研究，已確定採用逆滲透海水化淡技術生產的食水，可符合世界衛生組織所定的《飲用水水質準則》。這些年來，逆滲透技術日趨成熟，海水化淡的成本亦逐漸下降，我們認為現在是為香港發展海水化淡的適當時機。

隨將軍澳第137區海水化淡廠的策劃和勘察研究完成後，我們於二零一五年十一月委聘顧問為該廠展開設計工作。我們正準備就其「設計—建造—運作」的合約進行招標，以期於二零一八年年尾展開工程。擬建海水化淡廠將採用逆滲透技術，其食水產量為每日135,000立方米，其後可擴展至每日270,000立方米，為本港供應約百分之五至十的總食水用量。我們已完成海水化淡廠的相關輸水基建部分，即連接海水化淡廠至現有將軍澳配水庫的十公里水管的設計工作，該工程亦會隨後展開。

New Water Resources

The TWM strategy and its on-going initiatives are moving us towards a water supply structure that comprises multi-faceted sources, including local yield, imported Dongjiang water, sea water for flushing, desalinated water, recycled grey water and harvested rainwater as well as reclaimed water. These six water supply sources will be the pillars that altogether support Hong Kong's enhanced water security, reliability and resilience. Good progress has been achieved in establishing these new sources.

Desalination

We have been keeping abreast with the latest developments in desalination technology. The feasibility studies in 2002 and 2007 have confirmed that sea water desalination using reverse osmosis is a viable technology to produce potable water in compliance with the World Health Organization (WHO)'s Guidelines for Drinking-water Quality. The technology of reverse osmosis has become more mature and the cost of sea water desalination has been reduced over the years, making it a right juncture for Hong Kong to develop sea water desalination.

Having completed the planning and investigation study on a desalination plant in Tseung Kwan O Area 137, we engaged consultants in November 2015 to embark on the design of the desalination plant. We are preparing to invite tenders for a "Design-Build-Operate" (DBO) contract of the plant for works commencement in end 2018. The proposed desalination plant will adopt reverse osmosis technology, and will have a water production capacity of 135,000 m³ per day expandable to 270,000 m³ per day to meet about 5% to 10% of the overall fresh water demand of Hong Kong. The design of the associated water transfer infrastructure part of the desalination plant viz. 10 km water mains from the future plant to an existing service reservoir in Tseung Kwan O has been completed and its construction will then commence.

再造水

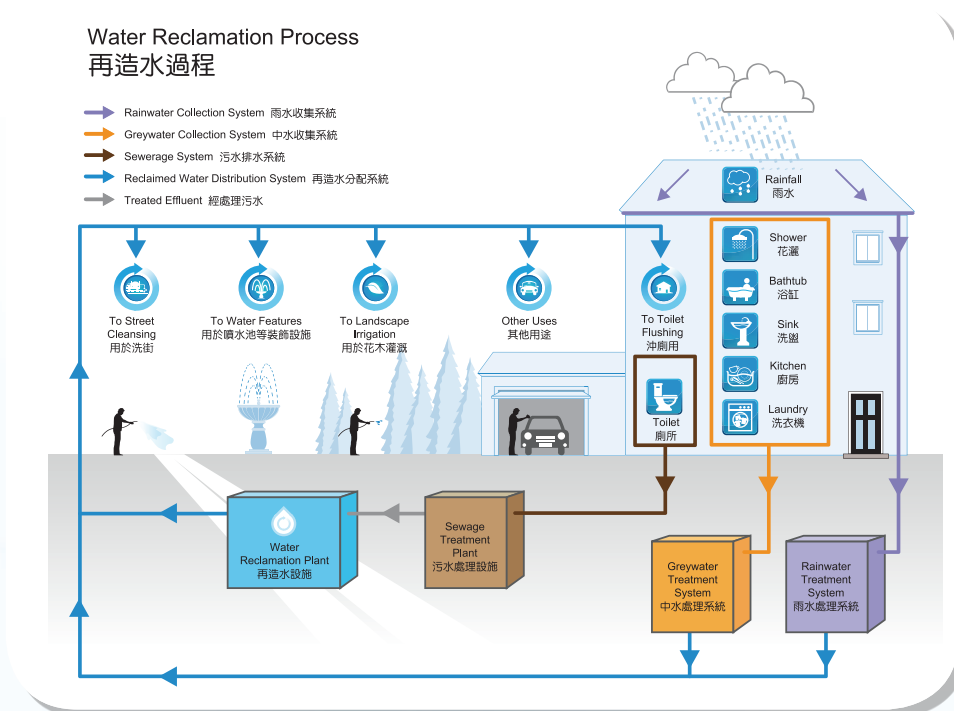
再造水是指經過污水廠高度處理的排放水而生產的水。香港於二零零六年開始推行再造水使用試驗計劃。政府在昂坪進行首項試驗計劃，將經污水處理廠處理過的污水轉化成再造水後，用作非飲用用途。使用再造水作非飲用用途除了可以節省食水資源（尤其是在那些供應海水作沖廁用途並不具成本效益的內陸地區），也可以減少處理後的污水排放量。因此，再造水是一種既節省食水又環保的水源。

水務署會繼續努力，以期在二零二二年由上水及粉嶺開始，把經石湖墟污水處理廠三級處理排放水生產的再造水，提供予新界東北部地區作沖廁用途。供應再造水將有助本港每年節省約2,100萬立方米食水。

Reclaimed Water

Reclaimed water is produced from highly treated effluent in sewage treatment works. Pilot schemes involving the use of reclaimed water began in Hong Kong in 2006. The Government has commissioned the first pilot scheme at Ngong Ping to provide reclaimed water, by converting the treated effluent from sewage treatment works, for non-potable uses. The use of reclaimed water for non-potable purposes can save fresh water especially in inland areas where supply of salt water for flushing is not cost effective and reduce the amount of treated effluent discharge. It can be regarded as a water-saving and environment-friendly water resource.

We continue our work to supply reclaimed water, converted from tertiary treated sewage effluent at the Shek Wu Hui Sewage Treatment Works, to the north-eastern part of the New Territories for flushing uses starting with Sheung Shui and Fanling from 2022 onwards. The supply of reclaimed water is estimated to save Hong Kong about 21 million cubic metres of fresh water each year in future.



發展再造水為新的水源是水務署推行的《全面水資源管理策略》中供水措施的一環。

Developing reclaimed water as a new water resource is one of supply initiatives under TWM Strategy implemented by the Water Supplies Department.

中水重用／雨水回收

從浴室、洗手盆、廚房洗滌盆和洗衣機等地方收集得來的水稱為中水。中水與收集的雨水經處理後可予以重用，作沖廁等非飲用用途。我們已就中水重用及雨水回收系統訂立指引，讓新建政府大樓安裝處理和循環設施，通過中水重用或雨水回收系統減少食水作非飲用用途的使用量。水務署在安達臣道石礦場用地發展項目中將興建中央中水重用系統，處理從發展區中收集的中水作以沖廁為主的用途。該系統包括一所中水處理廠及相關抽水系統、一個配水庫，以及收集中水和輸送經處理後的中水到客戶的管道。建造工程預期於二零一九年展開，並於二零二二年完成。

提升食水安全

目前，我們正根據世界衛生組織於二零一一年發布的第四版《飲用水水質準則》監測食水水質。在二零一五年食水含鉛超標事故發生後，水務署聯同有關的政府決策局及部門，不遺餘力地採取跟進行動，推行一系列有效改善本港食水安全的措施。

水務署已委聘顧問制訂《香港食水水質標準》。根據發展局成立的食水安全國際專家小組的建議，並大量參考海外的經驗和知識後，發展局與水務署已全面檢討現行的食水安全制度，制訂行動計劃，並預計於二零一七年九月推出計劃，以保障食水水質。這項行動計劃包含五個部分，分別是

Grey Water Recycling/Rainwater Harvesting

Water collected from baths, showers, wash basins, kitchen sinks and laundry machines etc. is known as grey water. Along with harvested rainwater, the grey water can be treated and reused for non-potable purposes such as toilet flushing. We have formulated guidelines on the implementation of rainwater harvesting and grey water recycling systems so that new government buildings with the potential of reducing their fresh water demand for non-potable applications through rainwater harvesting or grey water recycling system can be installed with on-site treatment and recycling facilities. WSD will construct a centralized grey water recycling system to treat grey water collected from the Anderson Road Quarry Site Development mainly for toilet flushing use. The system comprises a grey water treatment plant with associated pumping system, a service reservoir, pipes for grey water collection and distribution of the treated grey water to consumers. The construction works are planned to commence in 2019 for completion in 2022.

Enhancing Water Safety

Currently, we are monitoring drinking water quality in accordance with the fourth edition of the Guidelines for Drinking-water Quality published by the WHO in 2011. After the occurrence of the excess lead in drinking water incident in 2015, WSD, working together with relevant government bureaux and departments, has spared no efforts in taking forward, follow-up actions to implement a host of effective improvement measures that will enhance drinking water safety in Hong Kong.

WSD has engaged a consultant to establish Hong Kong Drinking Water Standards. Following the advice of the International Expert Panel on Drinking Water Safety (IEP) established by the Development Bureau (DEVB) and with reference to the wealth of overseas experiences and knowledge, DEVB and WSD has holistically reviewed the existing drinking water safety regime in Hong Kong and is developing an Action Plan for promulgation

「食水標準及水質監測優化計劃」、「水喉物料監管及新建水喉裝置驗收規定」、「水安全計劃」、「食水安全規管制度」和「宣傳及公眾教育」。

此外，水務署已開始全面檢討《水務設施條例》及《水務設施規例》，對法例作出修訂，以配合水管業界的最新發展、技術和做法。檢討工作包括檢討從業員的角色和責任，以及技術要求和水管物料標準。為此，水務署已確定了數項須優先處理的修訂，其中包括界定持牌水喉匠和水管工人的職責，以及該些有關更新內部供水系統所用水管物料標準的修訂。修訂草案將於二零一六至二零一七年度提交立法會審議。

展望未來，面對重重挑戰，水務署將繼續保持警覺，憑藉上下一心的凝聚力和積極主動的策略，不論是現在還是未來，都會致力提供優質服務、精益求精。

in September 2017 with an aim to safeguarding the drinking water quality. The Action Plan will comprise five components, namely “Drinking water standards and enhanced water quality monitoring programme”, “Plumbing material control and commissioning requirements for new plumbing installations”, “Water safety plans”, “Water safety regulatory regime”, as well as “Publicity and public education”.

Moreover, WSD has embarked on a holistic review of the Waterworks Ordinance and its Regulations with a view to revamping the legislation in order to cater for the latest developments in the plumbing trade as well as technologies and practices, including a review of the roles and responsibilities of trade personnel plus technical requirements and plumbing material standards. In this regard, WSD has identified several priority amendments including those that define the duties of the licensed plumbers and plumbing workers, and those related to updating the standards for plumbing materials used for the inside services and will submit them to the Legislative Council for deliberations during the 2016-17 legislative session.

Looking ahead, with continued vigilance against manifold challenges coupled with our cohesive and pro-active strategies, we at WSD will strive to deliver ever improving service quality now and the years to come.



林天星工程師，太平紳士
水務署署長

Ir LAM Tin Sing, Enoch, JP
Director of Water Supplies