





培養節約用水文化

Fostering a Water
Conservation Culture



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本署一直多管齊下，以「軟硬兼備」的措施，向住宅及非住宅界別推廣節約用水。

WSD has been adopting a multi-pronged approach to promote water conservation in both domestic and non-domestic sectors, applying measures in both softwares and hard wares.

提倡節約用水

用水效益標籤計劃

本署於二〇〇九年起實施自願參與「用水效益標籤計劃」，鼓勵客戶使用節水裝置。截至二〇一八年三月，計劃現已涵蓋沐浴花灑、水龍頭、洗衣機、小便器用具和節流器。

本署已制訂策略，分階段實施強制用水效益標籤計劃。我們首先於二〇一八年二月一日起已全面強制在新建樓宇和現有樓宇的水管工程中住宅處所的廚房和所有處所的浴室及洗手間均須採用符合所規定用水效益級別的節水裝置。我們相信以上的強制措施，將有助已註冊用水效益標籤計劃的產品得到更廣泛地使用。我們將會研究透過制訂法例，要求在零售市場售賣的指定用水裝置須具有用水效益標籤，方便消費者選擇購買節水裝置，進一步達至節約用水的目的。

Making Water Conservation Count

Water Efficiency Labelling Scheme (WELS)

In 2009, WSD launched the voluntary “Water Efficiency Labelling Scheme” (WELS) to encourage customers to use water saving devices. Up to March 2018, the scheme covers showers for bathing, water taps, washing machines, urinal equipment and flow controllers.

WSD has formulated strategies to implement the Mandatory WELS in stages. We have fully mandated the use of prescribed WELS products of designated water efficiency grade for kitchens of domestic premises as well as for bathrooms and toilets in all premises in the plumbing works for new and existing buildings since 1 February 2018. We believe that the above mandatory measures will promote more extensive use of WELS products. Next, we are exploring, through legislation to require designated types of water using devices on sale in the retail market to bear water efficiency label registered under WELS so as to facilitate the consumers to choose to buy water-efficient products to further achieve water conservation purposes.



已安裝節水裝置
Installed Water-saving
Devices with

127,000

住戶
households

在政府場所、學校及公共屋邨安裝節水裝置

水務署繼續為公共屋邨、政府場所和學校安裝節水裝置，以減少耗水量。截至二〇一八年三月底，89個公共屋邨約十二萬七千個住戶已安裝花灑和水龍頭節流器。此外，在政府場所和學校加裝節水裝置的第三階段工程已大致完成，為約3,150所政府場所和學校安裝超過53,000個節水裝置。

Retro-fitting Government Venues, Schools and Public Housing Estates with Water Efficient Devices

WSD has been continuing with water efficient devices installation work in public rental housing estates, government venues and schools for reducing water consumption. By the end of March 2018, nearly 127,000 households at 89 public rental housing estates have flow controllers installed in their taps and showers. Moreover, the third phase of retrofitting plumbing fixtures with water efficient devices in government venues and schools has been substantially completed, with over 53,000 devices installed in about 3,150 government venues and schools.

「齊來慳水十公升」運動

水務署鼓勵市民透過此運動承諾節約用水。截至二〇一八年三月，已有超過260個來自不同行業和界別的機構參與運動。另外，超過14萬個住戶參與運動及獲贈節流器。

“Let’s Save 10 Litres Water” Campaign

WSD encourages the public to save water through declarations in the “Let’s Save 10 Litres Water” Campaign. By the end of March 2018, over 260 organisations from various trades and sectors have participated in the Campaign. Furthermore, over 140,000 households have participated in the Campaign and they have been provided with complimentary flow controllers.



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提高公眾節水意識

節水教育與宣傳

自二〇一五／一六學年起，水務署向小學推出理論與實踐相結合的「惜水學堂」綜合教育計劃。「惜水學堂」旨在拓寬學生的水資源知識，並提高他們對節約用水及水資源可持續性的認識。截至二〇一八年三月底，參與綜合教育計劃的小學超過250間。

有見計劃非常成功，本署在二〇一七／一八學年推出先導計劃，將「惜水學堂」綜合教育計劃擴展至幼稚園，逾八十間幼稚園參與先導計劃，本署並將於二〇一八／一九學年將有關綜合教育計劃推展至全港所有幼稚園。

Raising Public Awareness of Water Conservation

Water Conservation Education and Promotion

Since the 2015/16 school year, WSD has launched the “Cherish Water Campus” Integrated Education Programme (IEP) in primary schools. The programme aimed at broadening students’ knowledge about water resources, raising their awareness of water conservation and water sustainability through integrating theory with practice. As at the end of March 2018, over 250 primary schools have joined the IEP.

Riding on this success, a pilot programme for extending the “Cherish Water Campus” IEP to kindergartens has been launched in more than 80 kindergartens in the 2017/18 school year. WSD will launch the IEP to all kindergartens in Hong Kong in the 2018/19 school year.

- 校園用水考察
School Water Audit



- 「惜水學堂」頒獎典禮(二〇一六／一七學年)
“Cherish Water Campus” Award Ceremony (School Year 2016/17)

二〇一二年，水務署在旺角辦事處設立臨時水資源教育中心，旨在提高青少年對水資源和節約用水的認識。截至二〇一八年三月，臨時水資源教育中心已接待超過六萬六千名主要來自小學及非牟利機構的訪客。由於旺角辦事處將於二〇一八年中搬遷至天水圍，水務署將會在天水圍新辦事處設立永久性的水資源教育中心，該中心預計將於二〇一九年下半年啟用，屆時展覽面積將會增加，以便向學生及不同年齡和各階層的社會人士展示更多和深入的節約用水及水資源資訊。

In 2012, WSD set up a temporary Water Resources Education Centre (WREC) at our Mong Kok Office with the aim of enhancing knowledge about water resources and water conservation among the younger generation. As at March 2018, the temporary WREC has received more than 66,000 visitors since its opening, mainly from primary schools and non-profit organisations. With the Mong Kok Office to be relocated to Tin Shui Wai in mid-2018, WSD will establish a permanent WREC at the new Tin Shui Wai office. The centre expected to be commissioned in second half of 2019, will have an expanded exhibition area to display more and in-depth information covering various aspects of water conservation and water resources to cater for students and a wider spectrum of the members of the general public of different ages.

「點滴香港 • 探古惜今創未來」巡迴展覽

“Water Conservation – Past • Present • Future” Roving Exhibition

水務署於二〇一七年八月至二〇一八年三月期間在全港十八區舉行了「點滴香港 • 探古惜今創未來」巡迴展覽，讓市民認識香港的水務歷史及水資源管理，並了解節約珍貴水資源的重要。水務署吉祥物「滴惜仔」亦到部分展覽地點與眾同樂，參與以惜水為題的互動問答遊戲和刮畫工作坊等，讓大小朋友寓學習於娛樂。展覽得到各學校、團體及公眾蒞臨參觀，反應非常熱烈。

WSD held “Water Conservation – Past • Present • Future” Roving Exhibition in 18 districts in Hong Kong during the period of August 2017 to March 2018. The public has gained a thorough understanding of Hong Kong’s water supply history and water resources management and understood the importance of conserving precious water resources. WSD’s Mascot “Water Save Dave” was present in some exhibition venues for interactive Question and Answer session and scratch-printing workshop etc. under the theme of water conservation so that the public could learn with fun. The exhibition has been well received and with enthusiastic participation by various schools, organisations and the general public.



• 「點滴香港 • 探古惜今創未來」巡迴展覽
“Water Conservation – Past • Present • Future” Roving Exhibition

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公開講座和展覽

聯合國把每年的三月二十二日定為「世界善用食水日」。為響應這個極具意義的日子，香港地球之友舉辦「水論壇2018」並獲水務署支持作為是次論壇的策略伙伴。論壇以「海綿城市及海岸防洪措施－應對極端氣候變化」為題，邀請了多位水務和環境保育的專家就水資源管理策略和應對氣候變化及極端天氣的長遠行動計劃發表演說。本署總工程師／發展(2)鍾兆榮先生也於論壇以「氣候變化－香港的穩健供水發展」為題演講，並於會場以展版介紹本港水資源的發展。論壇更設有討論及答問環節，以促進講者與現場觀眾交流意見和分享經驗。

用水效益檢討

在完成對泳池、公園、街市、廁所、垃圾收集站和懲教院所等由政府管理的設施的用水效益檢討，以及隨後發出相關的用水效益最佳實務指引後，本署一直與設施管理者合作，根據用水效益最佳實務指引落實措施，以提升有關設施的用水效益。本署亦已為酒店及餐飲業編寫及透過相關協會推出用水效益最佳實務指引，向業界推廣節約用水。有關工作的主要目的是讓我們的客戶為節約用水出一分力。用水效益最佳實務指引是以實際運作為基礎，以制訂平衡的節約用水措施，在無損整體服務水平的情況下，可實踐於日常運作之中。

Public Lectures and Exhibitions

The United Nations has designated the 22nd of March each year as the “World Water Day”. To mark the significance of this day, Friends of the Earth (Hong Kong) organised the Water Forum 2018, with WSD being the strategic partner, under the theme “Sponge City and Coastal Defence against Extreme Weather Events”. Experts in the fields of water supply and environmental protection were invited to give talks on the strategies for water resources management and long-term action plans for combating climate change and extreme weather. Chief Engineer/Development (2) of WSD, Mr CHUNG Siu-wing, Joseph, also shared on the topic of “Climate Change – Water Resilience Development of Hong Kong”, and introduced water resources development in Hong Kong at the exhibition panels in the venue. Panel discussions as well as Question and Answer sessions were held to exchange views and encourage sharing of experiences between speakers and the audience.

Water Efficiency Review

Following the completion of the water efficiency reviews and subsequent issuing of Best Practice Guidelines (BPGs) for government-managed swimming pools, parks, markets, toilets, refuse collection points and correctional institutions, we have been working with facility operators on implementing measures according to the BPGs to enhance water use efficiency at their facilities. We have also compiled and promulgated through related associations the BPGs for hotel and catering sectors for promotion of water conservation in the trades. Our primary objective is for our customers to play their part in contributing to water conservation. The BPGs are prepared by fact-based method to formulate balanced water-saving measures for implementation in day-to-day operations without compromising the overall level of services.

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)，並對違法人士採取法律行動。根據《水務設施條例》，除非水務監督批准，否則未經水錶量度取水即屬違法行為。在二〇一七／一八年，本署檢控組平均每月處理懷疑違反《水務設施條例》或《水務設施規例》的個案約為110宗，當中超過八成涉及非法取水。在宣傳方面，我們推出多個關於防止非法取水的教育和宣傳計劃，對象除本署內外的政府職員之外，亦包括市民大眾。有關教育和宣傳活動包括濾水廠開放日、研討會及學校巡迴探訪。教育和宣傳亦會透過水費單上的告示，以及在政府及私人物業、客戶諮詢中心及水資源教育中心張貼的海報及宣傳牌。

改善供水管網

水務署一直致力維持政府供水管網的健康。本署自二〇〇〇年起展開「更換及修復水管計劃」，分階段更換及修復全港長約三千公里的老化水管。隨着計劃於二〇一五年大致完成，政府供水管網的健康狀況已大為改善。水管爆裂個案由二〇〇〇至〇一年度約2,500宗大幅減少至二〇一七至一八年度約100宗。

Preventing Illegal Water Use

The Department is responsible for enforcing the Waterworks Ordinance (WWO) (Cap.102) and Waterworks Regulation (WWR) (Cap.102A) including taking legal action against offenders of the legislation. It is an offence under the WWO to draw unmetered water except with the permission of the Water Authority. The average number of suspected cases of contravention of WWO/WWR handled by the Department's Prosecution Unit per month in 2017/18 is about 110. Among these cases, over 80% are related to unlawful taking of water. On the publicity front, we conducted education and publicity programmes on preventing illegal taking of water not only to government officers within and outside the Department, but also to the public during events such as Water Treatment Works Open Day, seminars and school tours, and through notices on water bills as well as posters and promotion boards displayed at government and private properties, customer enquiry centres and the WREC.

Improving the Supply Network

WSD is committed to maintaining the health of the government water supply networks. WSD launched the Replacement and Rehabilitation Programme of Water Mains in 2000 to replace and rehabilitate about 3,000 kilometres of aged water mains in stages. Following the substantial completion of the Programme in 2015, the condition of the government water supply networks has improved significantly. The number of water main burst incidents reduced significantly from about 2,500 in Year 2000/01 to around 100 in Year 2017/18.

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在大幅改善供水管網的健康狀況後，本署推行風險為本的地下水管資產管理，以有效維持供水管網的健康狀況，同時平衡因進行水管改善工程對交通、社區、市民等造成的影響。本署會根據對客戶及交通的影響、水管物料、狀況、故障記錄、水管使用年期等，評估水管的風險，並為該些評為高風險的水管進行改善工程。

Given much improved condition of the water supply networks, WSD is implementing risk-based underground asset management of water mains to sustain the healthiness of the water supply network effectively, and at the same time striking a balance in view of the effect to the traffic, community and the member of the public due to the water mains improvements works. WSD will base on the effect to the customers and traffic in the event of failure, pipe material, condition records of failure, ages of the water main etc, to assess their risk. Life improvement works will be carried out to those water mains assessed with high risk.

用水流失管理措施

我們定期為本署的水管進行音聽視察、噪聲記錄和最低晚間流量測試，從而檢測水管的滲漏，並進行維修。我們亦正逐步建立智管網，在智管網下，食水分配管網將會分成超過2,000個監測區域，每個區域內的管網均安裝監測和感應設備。智管網基本上是把全港龐大的食水分配管網分成大小易於管理的監測區域，作持續監測它們的狀況，以決定處理它們的優先次序及有效的管網管理措施，包括(i)主動探測和控制滲漏；(ii)實施水壓管理，減低監測區域內水管的壓力；(iii)就滲漏和爆裂水管進行優質和快速的維修工作；以及(iv)重置不符維修成本效益的老化水管。此外，我們擬議設立一套智能管網管理電腦系統，用以分析從監測區域的監測和感應設備所收集

Water Loss Management Initiatives

We conducted regular leak detection on all our WSD water mains through sounding inspections, noise logging and minimum night flow tests in order to identify any leakage for repair. We are also progressively establishing WIN. Under WIN, the fresh water distribution network will be divided into more than 2,000 District Metering Areas (DMAs) within which monitoring and sensing equipment will be installed. The essence of WIN is to divide the vast fresh water distribution network in the territory into DMAs of manageable size for continuous monitoring of their conditions so as to prioritise them for taking effective network management actions including (i) active leakage detection and control; (ii) pressure management to reduce the pressure in the water mains of the DMAs; (iii) quality and speedy repairs of water main leaks and bursts; and (iv) reprovisioning of aged water mains which are beyond economic repair. Moreover, the vast amount of data

到的龐大數據。我們還正在探索應用各種先進水管滲漏檢測技術的可行性，以及已將部分測漏工作外判予專門承辦商，以加強檢測水管滲漏檢測的工作。

collected from the monitoring and sensing equipment in the DMAs will be analysed with the proposed Intelligent Network Management System (INMS). Besides, in order to enhance the leak detection works of our water mains, we are exploring the feasibility of applying various advanced technologies in leak detection of water mains and have outsourced some leak detection works to specialist contractors.



- 水務署致力盡早發現可疑漏水情況，以便即時採取措施避免進一步流失。
WSD is striving to detect suspected leaks as early as possible in order to allow immediate action to prevent further losses.

水管爆裂個案統計數字
Statistics on Mains Bursts

