

• Only 2.5% of the world's water is fresh water; the rest is seawater

 70% of fresh water is locked in the polar ice caps





More than half of the world's available fresh water supply allocated in below countries:



Countries suffering from severe droughts in recent years include:

2012 USA -Midwest

2005,2012 • South America -Amozon

2012 Brozil -San Paulo

2007 Spain -Valencia

> 2010 Central Africa

> > **Z**O)) **Easte**m Afrilas

2010.2013

China

-Chongging

-Guangxi

-Gujzhou

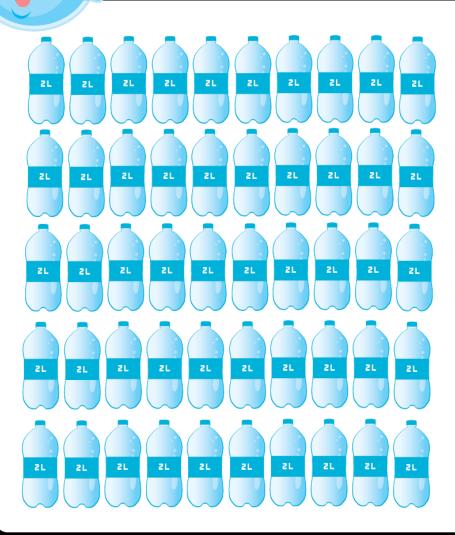
-Sichuan

🮐 🥊 -Yunan

2007 Australia -Vietoria

水器署

Water Supplies Department



The UN reckons that:
For personal and
domestic uses, about
50L to 100L of water
per person per day is
required





In many countries, women and children have to travel 6 km each day to fetch water

Sport Ground

15

Grounds



Number of people without access to improved water sources:

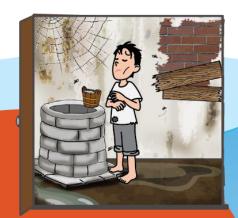
780 million





Number of people without access to basic senitation facilities:

2.5 billion





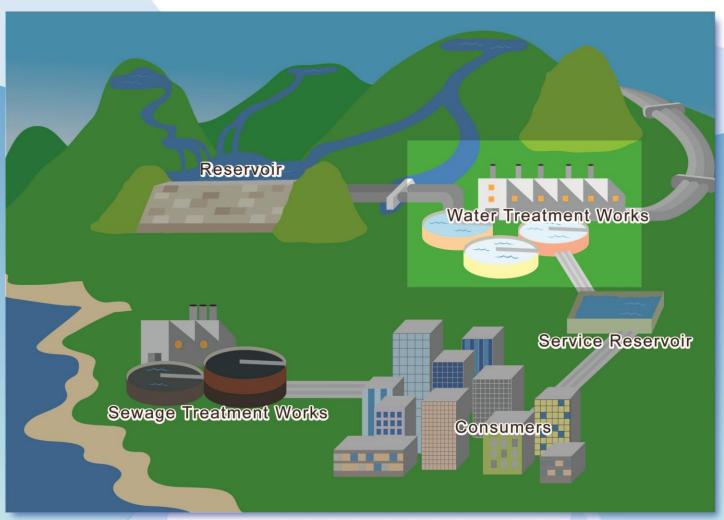


Water Cycle



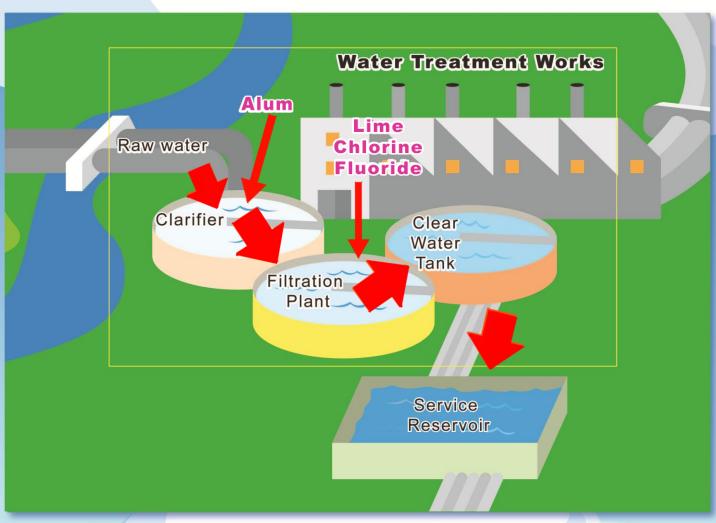


Wester Supply System



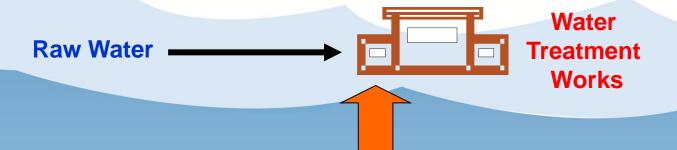


Water Treatment Process





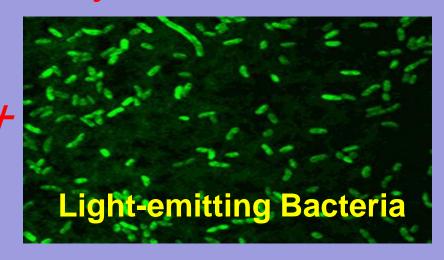
Water Supply System



Biosensing Alert System



Continuous Monitoring



Rapid Testing

Proper maintenance of Fresh Water Supply System in Buildings

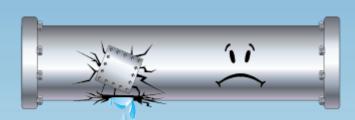


Water Supplies Department

How could the water be contaminated?



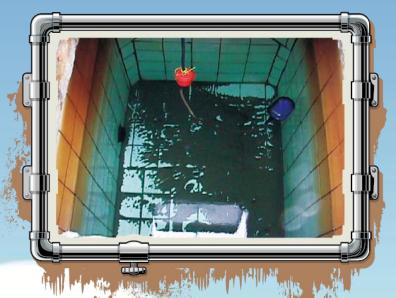
Substandard pipes and fittings



Old and worn-out inside service systems



Aged or rusted pipes



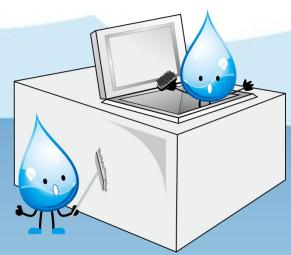
Inadequate cleaning to roof and sump tank



How to Maintain Quality Water?



1. Employ licensed plumbers to inspect the plumbing system regularly



2. Clean fresh water tanks at least once every 3 months



3. Maintain water filters properly



How to Maintain Quality Water?



4. Engage an accredited laboratory to take water samples and carry out testing

6. Use only cold water from water taps for cooking and drinking



5. If water has not been used overnight, run water taps before taking any water for drinking or cooking

Water Supplies Department

Water Sources in Hong Kong

Rainwater:

20%-30%

Dongjiang water:

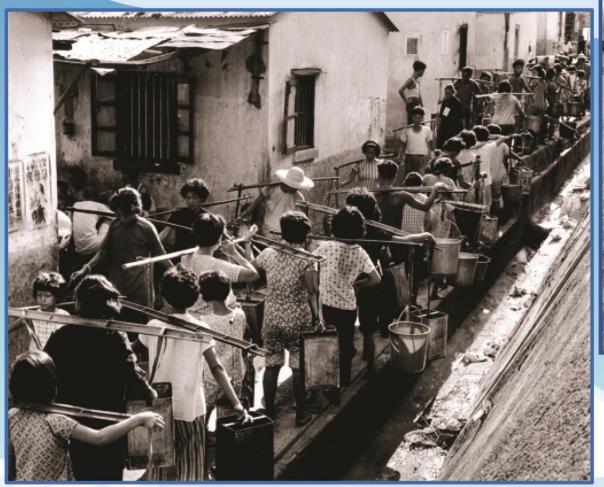
70%-80%

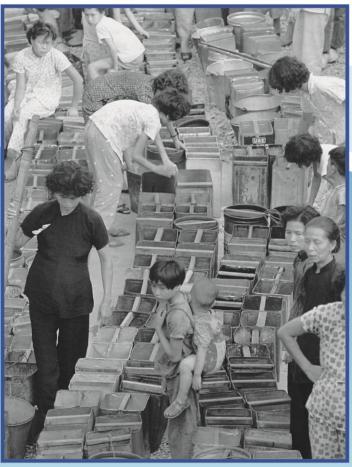
(through a 80 km supply network; Hong Kong shares water with other cities in China)



Shortage of Water

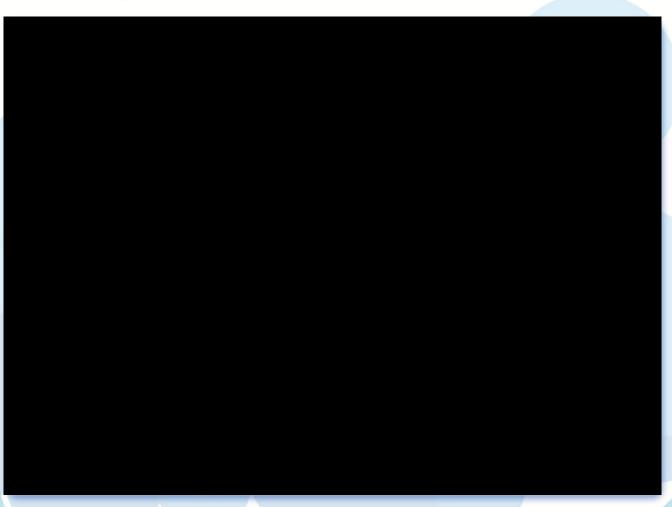
in 1960s







Shortage of Water in 1960s





From Water Rationing to Stable Water Supply

- New reservoirs
- Seawater for flushing
- Dongjiang water

No water rationing since 1982



Total Water Management (TWM) Strategy

 To better prepare Hong Kong for uncertainties such as acute climate changes

• To enhance Hong Kong's role as a good partner of other municipalities in Pearl River Delta in promoting sustainable development in the light of the rapid growth in water demand in the region



Water Supplies Department

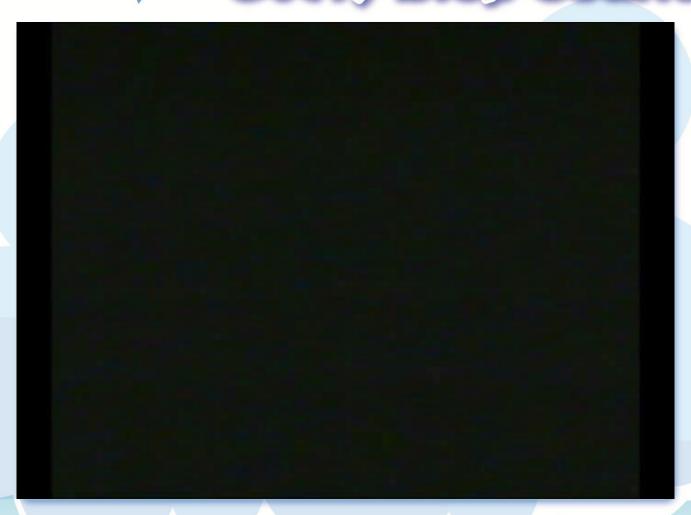
Total Water Management (TWM) Strategy

Aim:

To manage the demand and supply in an Integrated, Multi-sectoral and Sustainable manner



Video - Save Water for the Future, Every Drop Counts





Total Water Management (TWM) Strategy

Key points of the strategy:

 Containing growth of water demand through conservation

 Strengthening water supply management







Promoting Water Conservation

- TV APIs
- Radio APIs
- Advertisements
- School campaigns
- Water bill inserts
- Roving exhibitions
- Distribution of promotional leaflets, posters, brochures to the public
- Dedicated webpage
- Promotional activities such as WWD,
 WWMD, seminars, Open Days, etc





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How much water do you consume daily?

The UN reckons that:
For personal and domestic uses, about 50L to 100L of water per person per day is required





How much water do you consume daily?

The average water consumption per person per day in HK is:

Fresh water: 130L

Sea water: 90L









Water Saving Tips



Take a shower instead of a bath



Video - Save Water, Take Shorter Showers





Water Saving Tips



Do not wash the dishes under a running tap

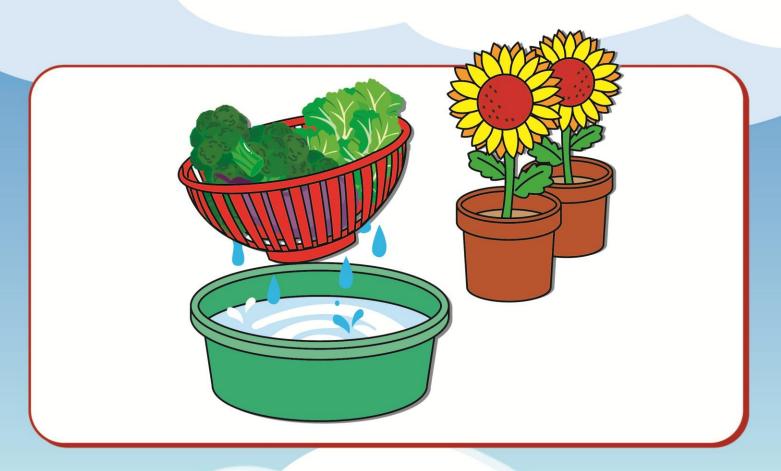


Water Saving Tips



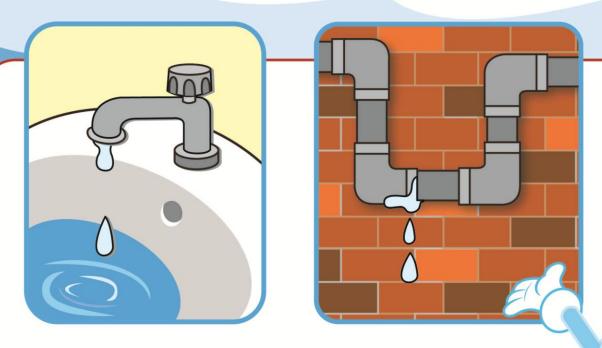
Do laundry with a full load





Reuse the water after washing fruits and vegetables for watering the plants

**Note: The control of the plants of



Inspect and maintain plumbing regularly to prevent water leaks





Use dual flush cistern and avoid flushing unnecessarily





Wash cars with a bucket of water and the towel, instead of a running hose





Use water saving devices



Water Efficiency Labelling Scheme (WELS)

- Similar to EMSD's Energy Efficiency Labelling Scheme
- Indicate the level of water consumption and efficiency rating of plumbing fixtures and appliances
- Water Efficiency Grading: 1 to 4; Grade 1 = Most water-efficient









Covers washing machines, showers for bathing, water taps, urinal equipment and flow controllers water Supplies Department

Installation of Flow Controllers



Flow controller Sample

WSD has started the flow controller installation programme in government buildings and schools



Replacement and Rehabilitation Programme of Water Mains

- Around 7,800 km network of water mains
- About 45% of the water mains were laid more than 30 years ago
- The programme commenced in December 2000 to replace and rehabilitate about 3,000 km of water mains





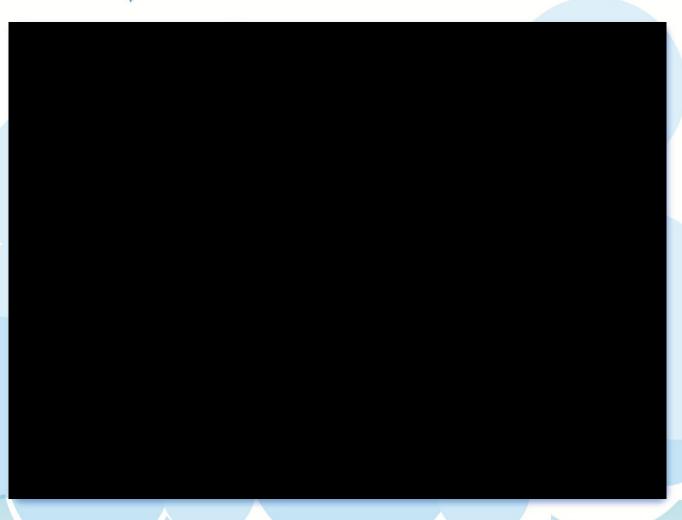
Active Leakage Control

- Enhance leakage detection by adopting new technologies for monitoring
- Implement pressure management in water supply zones by phases





Viceo - Prevent Water Leaks





Total Water Management (TWM) Strategy

Key points of the strategy:

- Containing growth of water demand through conservation
- Strengthening water supply management \(\)







Demand

Protection of Water Resources

- Strengthen current practice in protection of local water resources
- Continue dialogue with the Guangdong Authorities to ensure the quality of Dongjiang water



Water Reclamation

- The Government has conducted pilot schemes in Ngong Ping and Shek Wu Hui
- It will investigate the feasibility on providing reclaimed water to consumers in Sheung Shui and Fanling for toilet flushing and other non-potable uses
- It will promote the reuse of grey water and rainwater harvesting in both public and private developments



New Water Resources

 WSD has completed a pilot desalination plant study using reverse osmosis technology



WSD will further develop the option of desalination



Conclusion

Every drop' counts



Be prudent when you use water



Share water conservation message to friends and family





"Let's Save 10L Water" Campaign





"Let's Save 10L Water" Campaign

承諾宣言 Commitment Certificate



我, (參與者姓名),承諾參與「齊來慳水十公升」運動 支持善用珍貴的水資源。

I, (participant's name) , pledge to participate in the 'Let's Save 10L Water' Campaign in support of using precious water wisely.





每日慳水10公升 支持環保做精英 SAVE WATER Save the World-10 Litres Every Day





"Let's Save 10L Water" Campaign

