香港會制水？

「新常態」商圈

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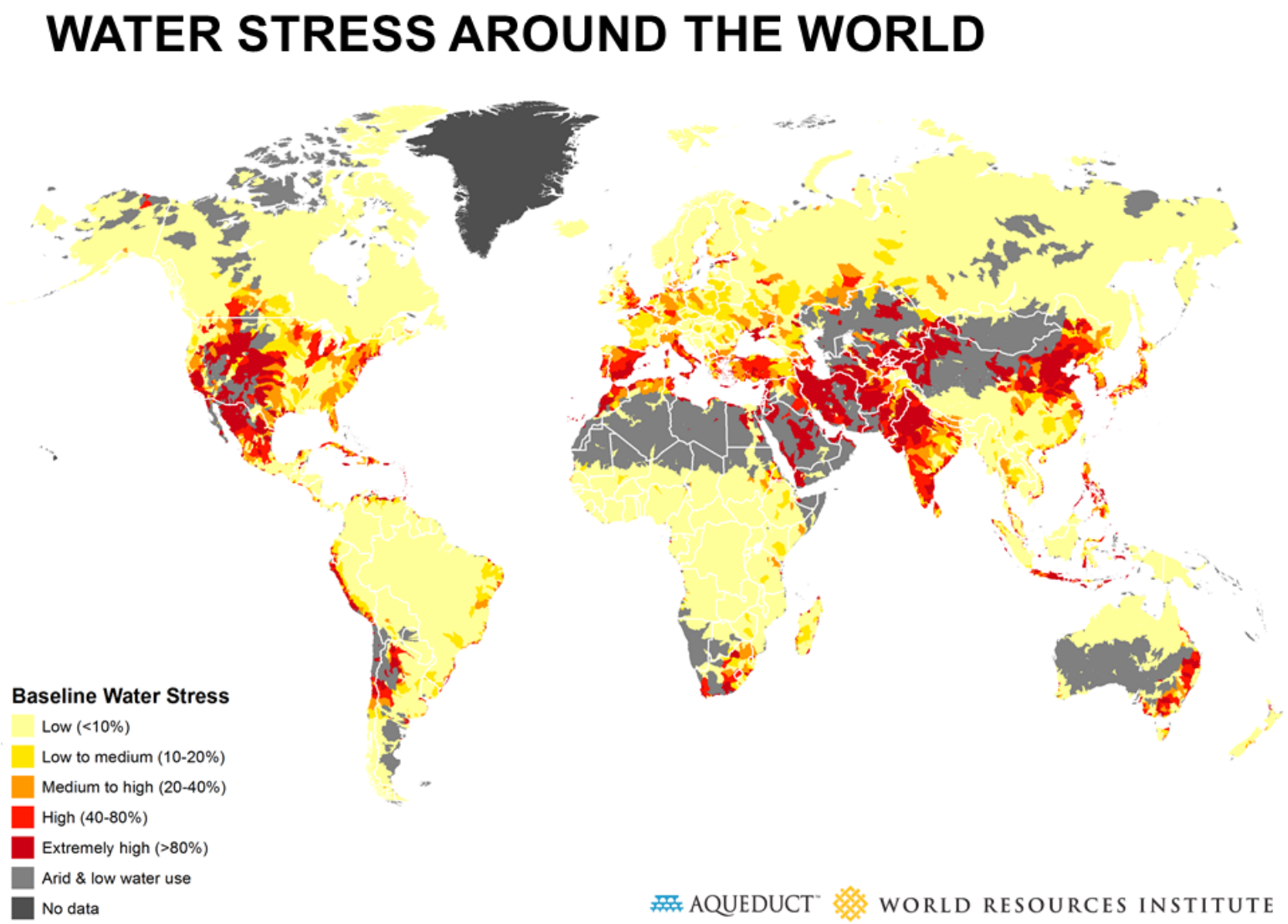
17.7.2021

聯合國可持續發展目標

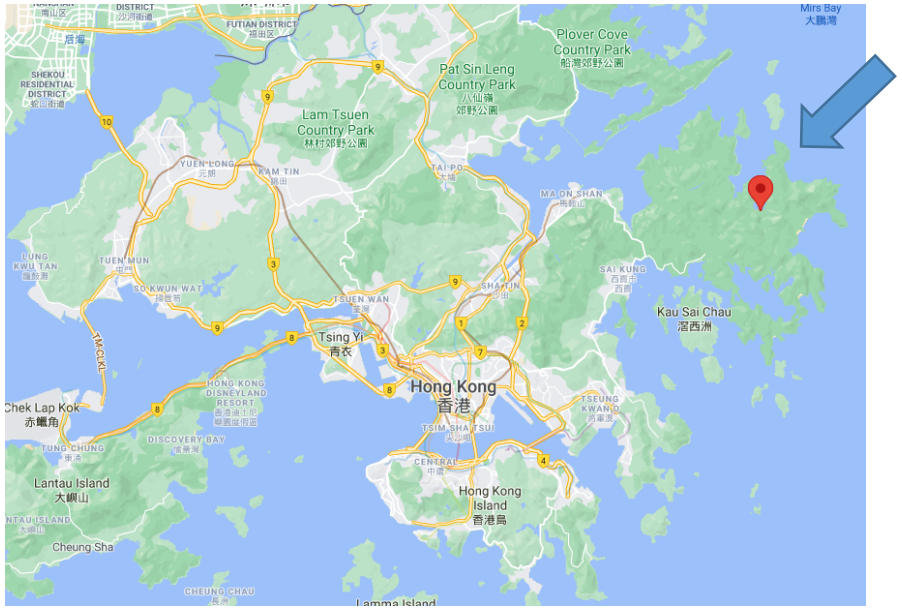

SUSTAINABLE DEVELOPMENT GOALS
1 NO POVERTY
2 ZERO HUNGER
3 GOOD HEALTH AND WELL-BEING
4 QUALITY EDUCATION
5 GENDER EQUALITY
6 CLEAN WATER AND SANITATION
7 AFFORDABLE AND CLEAN ENERGY
8 DECENT WORK AND ECONOMIC GROWTH
9 INDUSTRY, INNOVATION AND INFRASTRUCTURE
10 REDUCED INEQUALITIES
11 SUSTAINABLE CITIES AND COMMUNITIES
12 RESPONSIBLE CONSUMPTION AND PRODUCTION
13 CLIMATE ACTION
14 LIFE BELOW WATER
15 LIFE ON LAND
16 PEACE, JUSTICE AND STRONG INSTITUTIONS
17 PARTNERSHIPS FOR THE GOALS
SUSTAINABLE DEVELOPMENT GOALS

水資源貧乏地區


WATER STRESS AROUND THE WORLD
Baseline Water Stress
Low (<10%)
Low to medium (10-20%)
Medium to high (20-40%)
High (40-80%)
Extremely high (>80%)
Arid & low water use
No data
AQUEDUCT
WORLD RESOURCES INSTITUTE


DRYFEED

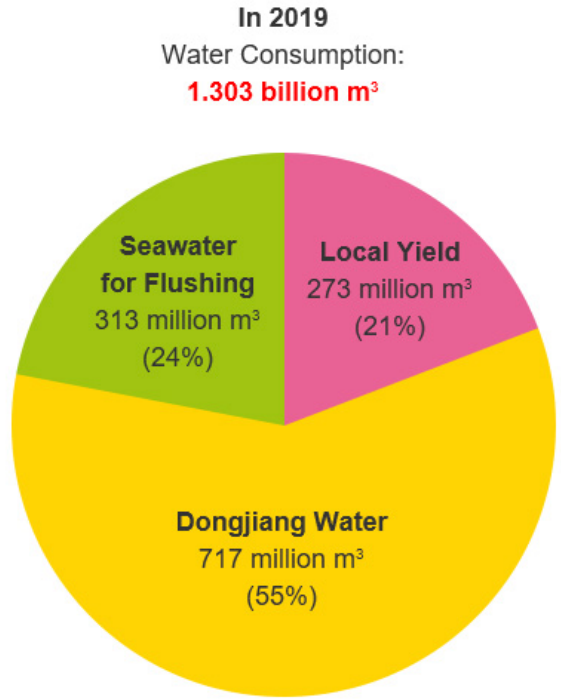
2021年6月赤徑


Plover Cove Country Park
Pat Sin Leng Country Park
Lam Tsuen Country Park
Kau Sai Chau
Tsing Yi
Hong Kong
香港
Chek Lap Kok
Lantau Island
Hong Kong Island
Cheung Sha

香港“天空之鏡”

2021雨量/水塘存水量

月份	雨量 mm (正常)
4	**32.5** (153.0)
5	**65.0** (290.6)
6 (全月)	**628** (491)
7 (截至12日)	**34** (386)



	2021年6月7日	去年同期
本港水塘總存水量 (百萬立方米)	361.651	426.481
佔總容量百分比(%)	61.71%	72.77%

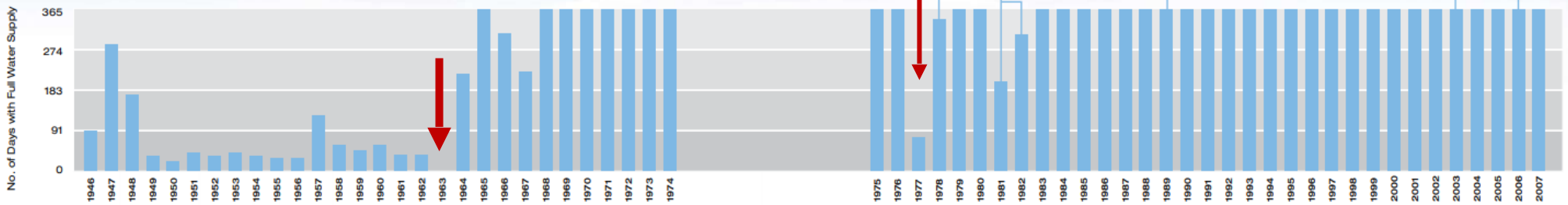
	2021年7月12日	去年同期
本港水塘總存水量 (百萬立方米)	368.501	424.029
佔總容量百分比(%)	62.88%	72.35%

香港24小時不停供水的日數

From Water Rationing to Reliable Water Supply

In Hong Kong, maintaining reliable water supply is also a challenge. Water shortage used to be a serious problem before the early 1980s. This was because of geographical constraints of water supply (including unreliable rainfall pattern) and continuous increase in demand for safe drinking fresh water due to rapid growth of population. Water rationing was imposed from time to time in the history of water supply. People's livelihood was severely affected. The cost on our economy was tremendous.

History of Water Supply in Hong Kong (1946-2007)



1957
Use of seawater for toilet flushing in Shek Kip Mei and Lei Cheng Uk Estate

1960
Water Supply Agreement with Guangdong Supply from Shenzhen Reservoir

1963
Completion of Shek Pik Reservoir
24.5 mcm capacity

1968
Completion of Plover Cove Scheme and Extension in 1973
230 mcm capacity

1959
Completion of Tai Lam Chung Reservoir
20.5 mcm capacity

June 1963 - May 1964
Severe Water Rationing
4 hours of supply every 4 days

1965
Completion of Lower Shing Mun Reservoir
4.3 mcm capacity

1965
Water Supply Agreement with Guangdong
68.2 mcm/year of Dongjiang water supply

1978
Completion of High Island Scheme
281 mcm capacity

1981-1982
Last water rationing in Hong Kong

1989
Water Supply Agreement with Guangdong
Maximum 1,100 mcm/year of Dongjiang water supply

2003
Commissioning of 83km dedicated aqueduct for delivery of Dongjiang water

2006
Water Supply Agreement with Guangdong
Flexible supply of Dongjiang water

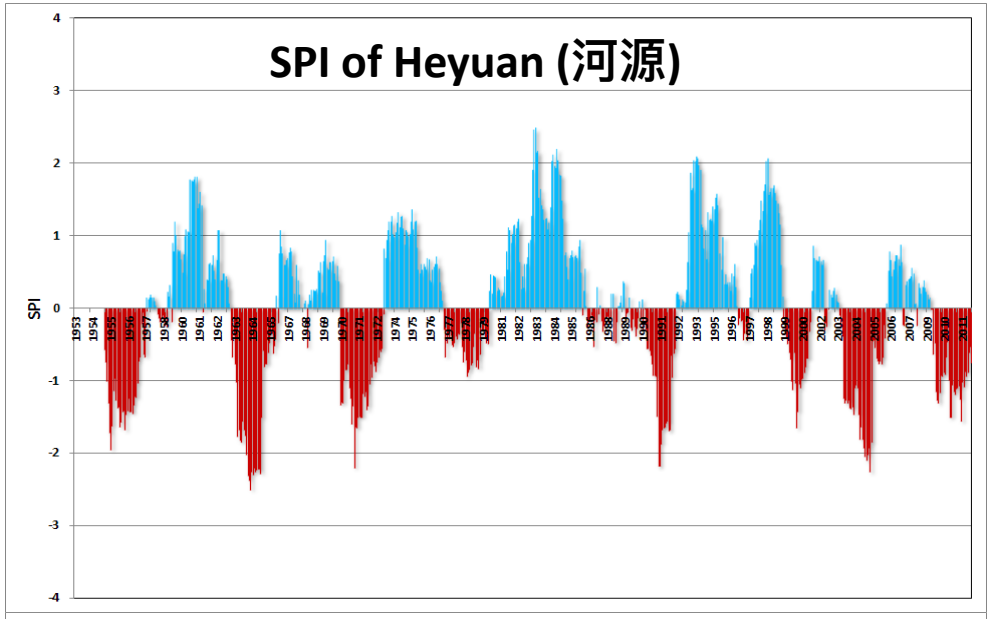
To resolve the problem, the Government adopted three important water management measures:

- Construction of new reservoirs, for example, the large-scale Plover Cove Scheme and High Island Scheme
- Use of seawater for toilet flushing
- Negotiation with Guangdong to increase import of Dongjiang water into Hong Kong through the Dongshen Water Supply Scheme

香港水務署 https://www.wsd.gov.hk/filemanager/en/content_1171/TWM.pdf


& CO.
勝記洋貨

東江之水「越」山來



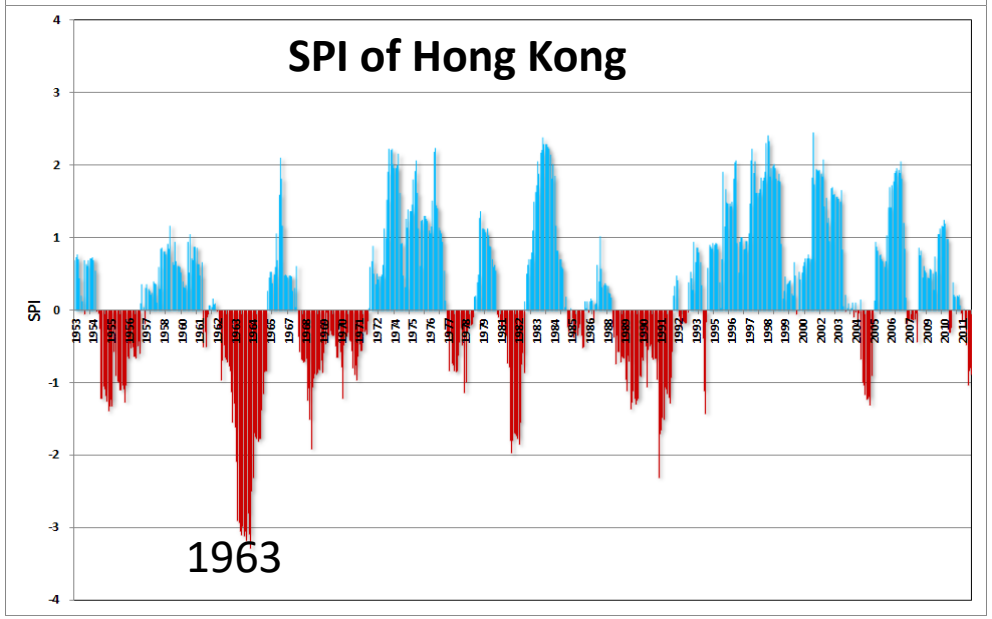
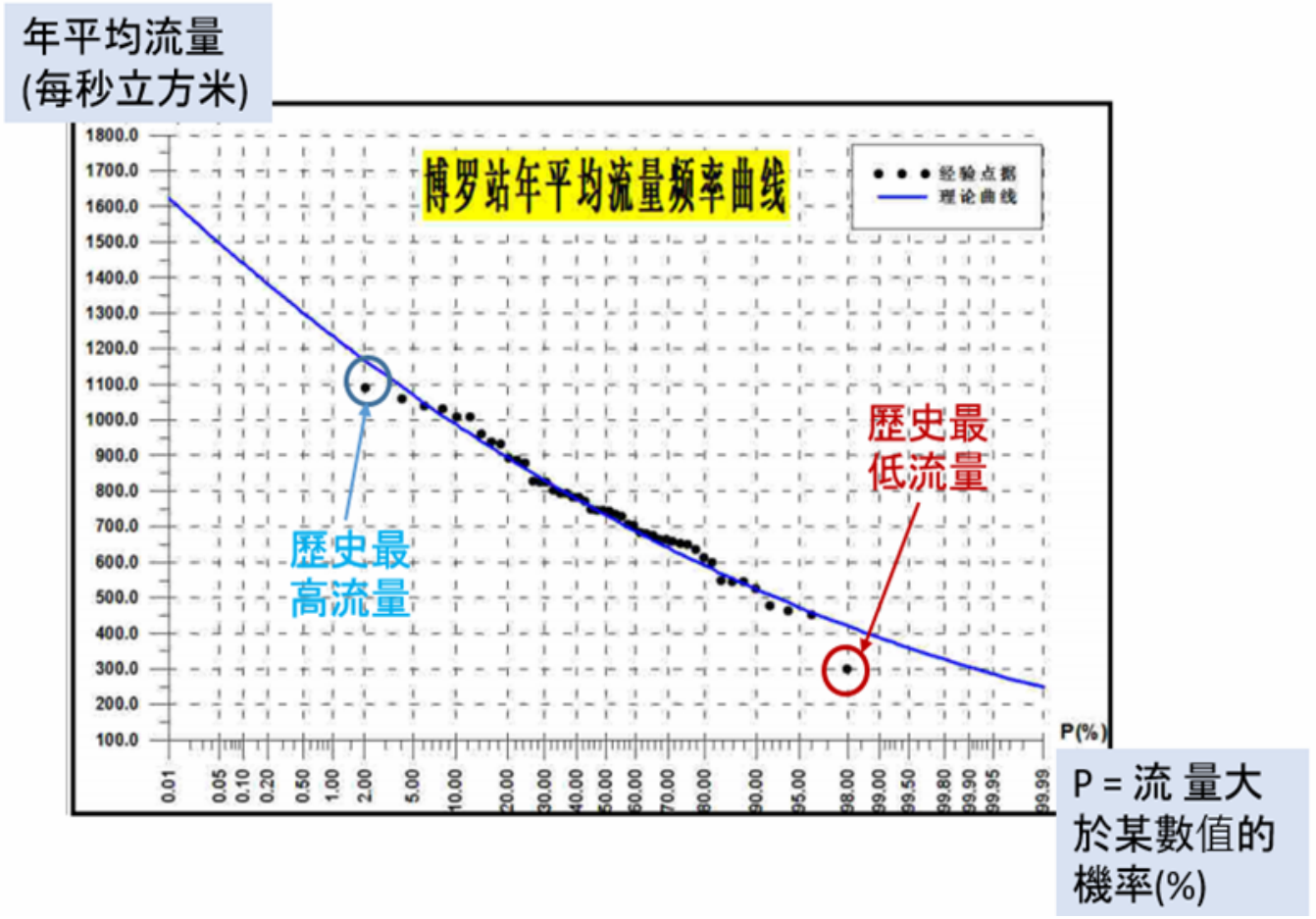


Table 1. SPI values

2.0+	extremely wet
1.5 to 1.99	very wet
1.0 to 1.49	moderately wet
-.99 to .99	near normal
-1.0 to -1.49	moderately dry
-1.5 to -1.99	severely dry
-2 and less	extremely dry

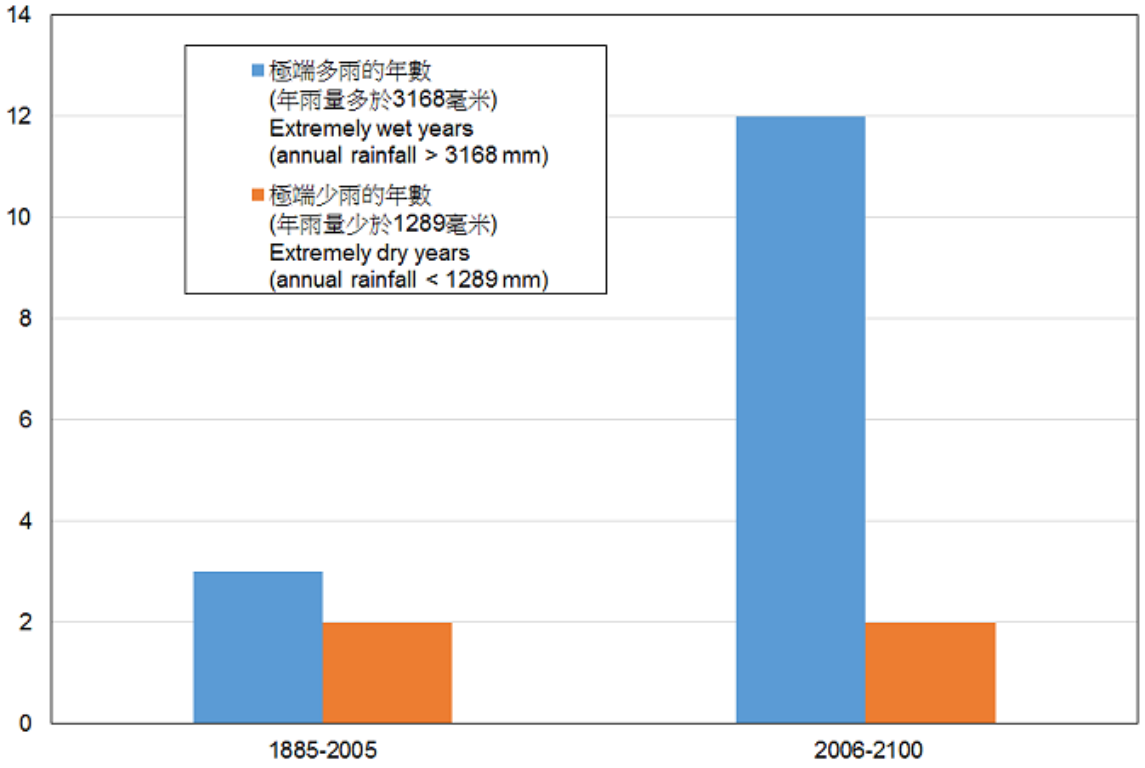
河水涓滴不定

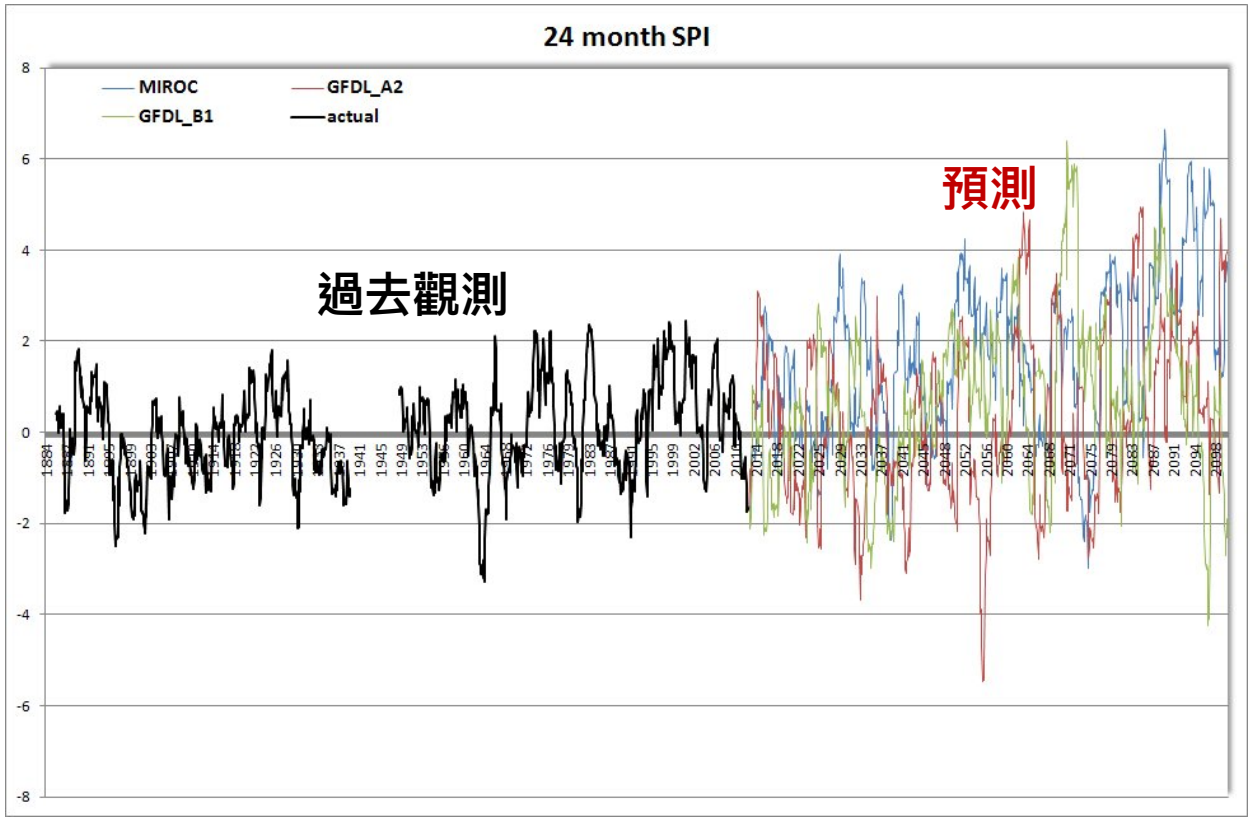


資料來源：武汉大学水资源与水电工程科学国家重点实验室

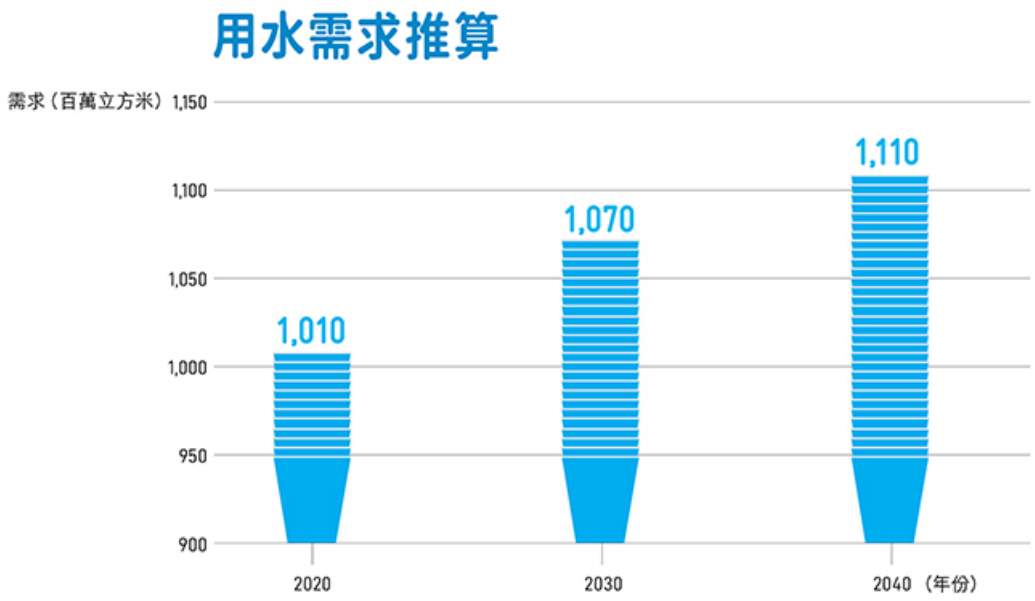
未來降雨預測: 暴雨頻仍 、 乾旱依舊

高二氧化碳排放情境





節約用水



= 每人每日
130公升

食物	耗水量
朱古力	24,000公升 / 公斤
咖啡豆	18,900公升 / 公斤
牛肉	15,455公升 / 公斤
雞肉	3,900公升 / 公斤
米	3,400公升 / 公斤
麵包	1,300公升 / 公斤
咖啡	1,120公升 / 公斤
牛奶	1,000公升 / 公斤
香蕉	860公升 / 公斤
蘋果	700公升 / 公斤
生菜	130公升 / 公斤

邁向零碳


Schematic Layout Plan of Dongjiang-Shenzhen Water Supply Scheme
After Improvement Works
Before Improvement Works
Taiyuan Pumping Station
Stage 2 & 3 Dongjiang Pumping Station
Linhu Pumping Station
Qiaotou
Shima River
Matan Pumping Station
Zhutang Pumping Station
Shaling Pumping Station
Shangpu Pumping Station
Yantian Tunnel
Yantian Reservoir
Yantian Pumping Station
Shawan Water Tunnel
Shenzhen Reservoir
Tangxia Pumping Station
Tangxia
Jinhu Pumping Station
Shima Pumping Station
Qiling Pumping Station
Zhangmutou
Bio-nitrification Plant
Shenzhen Reservoir
Taiyuan Pumping Station
Linhu Pumping Station
Qiling Pumping Station
Jinhu Pumping Station
Yantian Tunnel
Shawan Water Tunnel
Deliver Point to Hong Kong
Dongjiang