A19 Tuesday, March 22, 2005



WORLD WATER DAY 2005 CUM 40 YEARS DONGJIANG WATER SUPPLY



ADVERTISING FEATURE

Congratulatory Messages



Dr. LIAO Sau Tung. Sarah, JP Secretary for the Environment, Transport

Global natural resources are in dire shortage due to the continuous growth in population, and the lack of water resources is particularly acute. The recent severe drought. which is rarely seen in the Guangdong province, has rendered the plight even worse, making the proper use of water resources in the Pearl River Delta region of paramount importance. Having been enjoying the stable provision of water supply from Dongjiang for a long time, Hong Kong is obliged to convey our heartfelt gratitude to the goodwill of the Guangdong province. However, having regard to the imminent shortage of water resources, the Hong Kong Special Administrative Region government should hasten its implementation of the programmes on the utilization of water resources, water conservation, and development of new water sources. With such programmes, Hong Kong can then achieve its objective as one of the cities that provide water in a sustainable manner in future, and thereby helps the development of the entire Pearl River Delta region and the Guangdong province in the long run.

Today, on this occasion of the 40th anniversary of Dongjiang water being supplied to Hong Kong and the celebration of the United Nations' World Water Day, let us live up to the publicity slogan "Save water for the future. Every drop counts", and make effort to protect our water resources.

Dr. LIAO Sau Tung, Sarah, JP Secretary for the Environment, Transport and Works



Y.C. LO, JP Permanent Secretary for the Environment, Transport and Works

Today is the 40th Anniversary of Dongjiang water being supplied to Hang Kang in conjunction with the United Nations' World Water Day. It is really a great moment that

In retrospect, the Dongjiang water has been supplied to Hong Kong by the Guangdong authorities for four decades and has helped address our local problem of water resources ever since. Over the period, the Hong Kong government has also endeavoured to enhance its services in water supply. Recent initiatives include the implementation of the rehabilitation and replacement programme of ageing water mains and the various pilot studies on the recycling of sewage effluent and desalination. Apart from this, the general public also pitches in with the government by conserving water and making contributions to the sustainable development on water provision.

I would like to take this opportunity to express my deepest gratitude to the Guangdong authorities and the motherland for their continuous support to Hong Kong over the years. I also hope that under the principle of "One Country, Two Systems*, Guangdong and Hong Kong will forge even closer ties and co-operation in future.

Yiu Ching LO, JP Permanent Secretary for the Environment, Transport and Works (Works)



William KO . JP Chairman of the IWA Regional Committee of

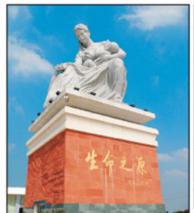
The fact that global water resources are developing from the shortage in quantity to the deterioration of quality is one of the pressing contemporary issues that the world has to face up to. Not only is the issue critical to the quality of life of human beings, but it also affects our health or even survival. Nowadays, water scientists and experts around the world are striving to explore ways to optimize the use of water resources, to control the discharge of pollutants, and to

enhance the wastewater treatment and recycling techniques. Water is our lifeblood. Four decades ago, under the special care and arrangements of our motherland, Dongliang water started coming through the mountains to Hong Kong, and helped resolve the long standing local water shortage problem. Since then, Hong Kong has been growing up robustly and rising to become one of the four little dragons in

Coincidentally, today is the United Nations' World Water Day. For this cause, we must keep on enhancing our awareness of the water shortage crisis. While enjoying the fruits of our predecessors' effort in bringing Dongjiang water to Hong Kong, we should also jointly treasure, conserve and

William C.G. KO, JP Chairman of the IWA Regional Committee of Hong Kong

40 Years of Water Supply from Dongjiang



Supply Improvement Works Exhibition Centre

port some 160 years ago, local water

resources have never been able to meet

population after the Second World War

(WWII), the demand of water for

ndustrial uses grew significantly

together with the economy. As a result,

water restrictions had been routines

since late 1940s. Only until 1 March 1965.

the resource conditions were greatly

Kong against numerous topographical

Hong Kong". With the overwhelming

quest for protecting water resources and

scrupulous use of water all over the

world, and under the prevailing severe

droughts in Guangdong, this is an

opportune time for the grown-ups to

revisit the history of the Dongjiang water

supply and the youngsters to appreciate

the efforts of their predecessors. They

will then realize that developing and

protecting water resources are really

daunting tasks. This will have a positive

impact on rolling out the Total Water

People's Republic of China (PRC), the

Guangdong Provincial Government

devoted a lot of effort to the provision of

hydro conservancy facilities. The largest

reservoir in the Guangdong Province and

the Dongliang catchment - the 13.9 billion

cubic metre Xinfengjiang Reservoir · was

completed in 1958. By the end of 1959,

construction of the Shenzhen Reservoir,

which was for flood attenuation and

hydro power generation, had started. The

reservoir dam was completed in March

1960. At the completion ceremony held

on 5 March, the then Provincial Party

Secretary General Tao Zhu (阿醬), when

addressing a group of guests including

representatives from Hong Kong,

expressed that water could be drawn

from Shenzhen Reservoir to Hong Kong if

there was such a need. After coming

back to Hong Kong, the local celebrities

Guangdong authorities to the Hong Kong

relayed this sincere offer from the

Shortly after the establishment of the

Management programme in Hong Kong.

This year marks the 40th anniversary



The signing ceremony of the Agreement on Dongshen-Hong Kong water supply between the Deputy Director of Public Works, also the Director of Water A statue in the podium of Dongshen Water Supplies, T.O. Morgan, and the Director of the Guangdong Province Water Conservancy and Hydro electric Bureau, Liu Chao Lun on 22 April 1964. Photo courtesy of Sil-Metrople Organisation Limited

supply shortage problems at the time. After some discussions, the first the demand. With the rapid increase in agreement for importing Guangdong water to Hong Kong was reached by the end of 1960. Water was to be supplied from Shenzhen Reservoir at an annual quantity of about 5 billion gallons (or about 22.3 million cubic metres) and at a price of RMB 0.1 (equivalent to HK\$0.234 at that time) per 1,000 gallons (or 4.5 Improved as Dongjiang water (water from cubic metres). Both sides would install the East River) started to run to Hong equipment to facilitate better communication. As regards supply infrastructures, Hong Kong had to complete the distribution network within of *Importation of Dongjiang water to its territories. The agreement was executed in Shenzhen on 15 November 1960. Shenzhen Reservoir started to supply Hong Kong with raw water on 1

February 1961. This agreement could not resolve altogether the water supply problems, which were aggravated by the everincreasing demand brought about by the burgeoning economy. After the typhoon in September 1962 and until the onset of the wet season in April and May in the ensuing year, there was hardly any appreciable rain. Water restrictions were becoming more acute after April 1963. People of Hong Kong had to look for water sources on their own to meet their daily needs whereas the commercial sectors were even more proactive in looking for ways to overcome water shortage. On 23 May 1963 when the Waterworks Office announced that water would only be supplied for 4 hours in every 4 days from 1 June onwards, the Chinese General Chamber of Commerce (CGCC) and the Hong Kong-Kowloon Federation of Trade Unions (now the Hong Kong Federation of Trade Unions) respectively sent telegrams on 24 May and 25 May to the Governor of Guangdong Province, Chen Yu (陳郁). stating Hong Kong's dire situation under the drought and requesting assistance. In the 25 May reply to both parties,

Between 1 June to 4 June 1963, the Deputy Director of Public Works E.P.

Governor Chen promised to try his best

again to help resolve the water supply

Ever since Hong Kong became a trading government, hoping to resolve the water Wilmot-Morgan, together with an officer from the Marine Department and an engineer from the Waterworks Office went to Guangzhou to discuss free abstraction of fresh water from Zhujiang (Pearl River) by tankers for use in Hong Kong. The first tanker "lanthe" arrived at Huangpu Port on 25 June and returned to Hong Kong on 26 June after charging the hull with fresh water. The water was discharged and pumped into Tai Lam Chung Reservoir. Throughout the drought the Hong Kong Government chartered a fleet of 14 tankers, which shipped about three billion gallons for about 13.6 million cubic metres) of river water to Hong Kong from June 1963 to April 1964 To resolve the water supply problems

> in the long term, Prime Minister Zhou Fnlai in 1963 approved the Implementation of Phase I of the Dongjiang-Shenzhen Water Supply Scheme (DSWSS). Representatives of the Guangdong Provincial government and Hong Kong government had two discussions and on 22 April 1964, Deputy Director of Public Works T.O. Morgan, representing Hong Kong, and Head of Guangdong Province Conservancy and Hydro-electric Bureau Liu Zhaolun (劉光倫), signed the supply agreement in Guangzhou. Apart from the official representatives of both sides, others who had contributed to the conclusion of the supply agreement were also present. They included Head of Xinhua News Agency Liang Weilin (染豉林) and Deputy Head Liang Shangyuan (梁上好), President of CGCC Wong Foon Shing(王宜鼓) and Vice-President Ko Cheuk Hung (高卓姓), President of Hong Kong Federation of Trade Unions Chen Yiu Choi(陳撰材), Head of Ta Kung Pao Fei Yimin (費彝民), President of Macau CGCC Ho Yin(何賢)and Ma Man Kei (馬萬祺).

> The construction of Phase I of DSWSS started in February 1964, well before the signing of the official agreement, so that the vital underwater works could be completed before the onset of the wet season, thus ensuring subsequent works would not be adversely affected by the rainy weather. In fact, construction works proceeded along with the design

work to save time. The Phase 1 works comprised 6 dams, 8 pumping stations, 3 kilometres (km) of canals and 16 km of artificial channels to deliver Dongjiang water along a 80 km long route, firstly upstream via the the Shima River to the highest point at Yantian Reservoir and then downstream to the Shenzhen Reservoir. The Dongjiang water would further flow through 3 km of steel pipelines for reception by the Muk Wu pumping station at the Hong Kong border. Despite its enormous scale and complexity, the scheme was completed in January 1965, i.e. only about 11 months after the start of construction. The Deputy Governor of Guangdong Province Lin Liming(林李明) officiated at the completion ceremony held on 28 February. The Dongjiang water officially commenced to run to Hong Kong on 1 March 1965, laying a firm foundation for resolving Hong Kong's water shortage

With the continuously increasing water demand in Hong Kong, DSWSS has been extended three times, and can now fully satisfy the present day demand of Hong Kong and Shenzhen. In fact, after the last water restriction in May 1982, water restriction has become a historical term. To date, Dongjiang water accounts for 70% to 80% of the total fresh water supply. To further improve the water quality, the Guangdong Provincial Government started in the early 2000s the construction of a closed aqueduct to replace the Shima River for delivering Dongjiang water direct to Shenzhen Reservoir. This would protect the Donoilang water, which is of Chinese National Standard Class II surface water quality, from contaminations on the original route. The closed aqueduct does not only supply quality raw water to Hong Kong, it also signifies both the sincere friendliness of the Guangdong people towards the people of Hong Kong, and the closer cooperation of both sides under

"One Country Two Systems". 40 years has passed, now 90 years old Ip Yeuk Lam(葉若林), Permanent Honorary President of CGCC, still vividly remembers how CGCC and his friends helped arrange for the importation of



from the Dongjiang river system which was some 80 km from the Hong Kong borders.

Guangdong's

rapid

Dongjiang water to Hong Kong. He

considers that this task is the most

successful achievement in all the years

he has had with CGCC. He recalled, "I

suggested to our President Ko Cheuk

Hung the idea of importation of

Dongjiang water by direct piping. The

President agreed with the proposal and I

immediately discussed with Richard

Charles Lee (利銘澤) & C N Chau (周线年).

Tat(湯秉獎) Wong Foon Shing and I went

to Guangzhou and successfully secured

an offer from Provincial Party Secretary

General Tao Zhu and Governor of

Guanadona Province Chen Yu, to supply

water to Hong Kong free of charge. After

Charles Lee reported the matter to the

Governor David Trench, who considered

that the water should not be free of

charge. Tong Ping Tat, Wong Foon Shing

and I then went to Guangzhou again

advising Tao Zhu of David Trench's view.

Tao Zhu suggested a price of RMB 0.1 per

1,000 gallons. Finally, the Hong Kong

together with some other Presidents

went to Guangzhou for the third time to

discuss with Tao Zhu and Chen Yu the

detailed means to deliver the Dongjiang

water. It was concluded that excavation

of open channels should be adopted.

Channels for carrying water would be dug

from Dongliang to Shenzhen and a

reservoir be built at Shenzhen for

storage. Pumps would be procured at

Belling and Shanghal for installation at

high levels along the route. With the full

support of the Chinese Government, who

gave priority to the provision of steel

cement, timber and machinery, the major

engineering works were completed in a

very short period of about nine months."

concerted efforts from all parties

concerned, has led to the importation of

Dongjiang water to Hong Kong, which

was one of the corner-stones for the

present prosperity. If the drought had

occurred between the end of WWII and

the founding of the PRC in 1949, the

impact would not have been as great as

the population was small and the

economy had not yet recovered.

The severe drought of 1963-64, with

wernor agreed with the price, and

we came back to Hong Kong, Richard

sequently, Ko Cheuk Hung, Tong Ping



Dr. Sarah Liao officiated at the commissioning ceremony of the Dongshen Water Supply Improvement Works

environment in the mainland has brought since 1979, might not have happened. about a vast expansion in population, thus opening a huge gap in demand and supply. And if the drought had come several years later, at the commencement of the Cultural Revolution, the politically sensitive crossborder supply issues might not have got off the drawing board and perhaps the whole development history of the Pearl River Delta (PRD) would have been totally

economic

With rapid development in the PRD the competition for water resources will become more and more intense. As Hong Kong is one of the places that rely heavily on the Dongjiang water resources, we should map out the details of the Total Water Management programme as early as possible and implement the various items in the programme, such as better utilization of resources, water conservation and exploration of new water resources expeditiously. The well being of the water supply in Hong Kong will have significant impact on the long term development of the PRD and the Guangdong Province.

Since then, the change in political development under the Open Door Policy

different. If water supply problems in Hong Kong had not been resolved by 1970s, the urbanized development and economic re-structuring in Hong Kong. which provides the impetus for