

新界北區防洪策略 Flood Prevention in North New Territories



深圳河-文錦渡橋上游
Shenzhen River-Upstream of Man Kam To Bridge

麻笏河排水道第一期工程已於二零零八年年底完成。加建的六條大型排水管令九龍坑橫過港鐵的行車隧道及康樂園附近的水浸問題大大改善。

現正進行建造及規劃設計的梧桐河、雙魚河、平原河及麻笏河支流防洪工程將於二零一二年完成，北區的水浸情況將可進一步改善。

自一九九五年以來，我們已於新界北區成功除去十八個水浸黑點，並減輕兩個黑點的水浸程度。截至二零零八年六月，區內尚有六個水浸黑點。當該區河道治理及改善工程陸續完成後，我們預期能除去更多位於梧桐河、雙魚河及平原河盆地附近的水浸黑點。

Ma Wat River Project Stage I has been substantially completed in 2008. With the addition of the 6 numbers of large diameter cross-rail pipes, the flooding problem in Kau Lung Hang MTR East Rail Underpass and Hong Lok Yuen has been significant improved.

By completion of the drainage improvement works in the upper reaches of Ng Tung River, Sheung Yue River, Ping Yuen River and Ma Wat River in 2012, the flooding situation in the NNT will be greatly improved.

Since 1995, 18 flooding black spots have been eliminated and another 2 have been downgraded in the North District. As at June 2008, there are 6 flooding black spots in the NNT. We expect more flooding black spots in the Ng Tung River, Sheung Yue River and Ping Yuen River Basins will be removed when ongoing river training works and drainage improvement works are progressively completed.



深圳河-文錦渡橋下游
Shenzhen River-Downstream of Man Kam To Bridge

為解決新界北區水浸問題，香港特別行政區政府共投資超過四十九億元進行一系列的防洪工程。

這些防洪工程大致可分為兩類：河道治理工程和鄉村防洪抽水計劃。河道治理工程包括拉直、擴闊和挖深現有河道，以提升河道的排洪能力。鄉村防洪抽水計劃包括為低窪地區的鄉村設置防洪堤和抽水站，防洪堤防止暴雨時洪水湧入村內，而村內的雨水則被引入抽水站內的蓄洪池，再抽出防洪堤外的河道排放。

To mitigate the flooding problem in the North New Territories (NNT), the Government of the Hong Kong Special Administrative Region has implemented a flood prevention programme costing over \$4.9 billion.

The flood prevention programme consists of two main types of projects: river training works and village flood pumping schemes. River training works involve straightening, widening and deepening of the river channels to increase flood discharge capacity. Village flood pumping schemes involve the construction of embankments with pumping station around low-lying villages. The embankments prevent flood water from entering the villages during heavy rainstorm. Rainwater collected within the villages is diverted to flood storage ponds of the pumping stations and then pumped to the drainage channels outside the embankments.

防洪工程進度 Progress of Flood Prevention Projects

新界北區主要覆蓋上水、粉嶺及打鼓嶺等地。

The NNT covers Sheung Shui, Fanling, Ta Kwu Ling, and their adjacent areas.



深圳河-羅湖
Shenzhen River-Lo Wu



深圳河-圓嶺仔
Shenzhen River-Yuen Leng Chai

自一九九七年以來，我們已在區內完成約30公里長的防洪渠道及兩個鄉村防洪計劃，工程總值約三十六億元。而正在進行和規劃設計中的防洪工程，分別總值約十億元和三億元。

近年，我們在區內完成的防洪工程包括治理深圳河第三階段的工程(二零零六，長4公里)、平原河治理工程(二零零六，長1.7公里)、粉嶺東圍圍至新圍雨水排放系統改善工程(二零零八，長1公里)、打鼓嶺水流坑雨水排放系統改善工程(二零零八，長半公里)和大埔麻笏河第一期(二零零八，長1.8公里)。



打鼓嶺水流坑的矩形雨水明渠
Rectangular drainage channel at Shui Lau Hang, Ta Kwu Ling



麻笏河排水道建造工程第一期地盤鳥瞰圖
Aerial view of the construction site of Ma Wat River Channel Phase 1

總長15公里的河道治理工程及3.5公里的雨水渠改善工程亦正在建造中，他們包括第二期麻笏河改善工程、上水及粉嶺雨水渠改善工程、梧桐河、雙魚河、平原河及麻笏河支流的河道改善工程。這些工程已於二零零六年起相繼開展，預計於二零一二年完成。

Since 1997, we have constructed about 30 km of drainage channels and 2 village flood protection schemes and the total construction cost is about \$3.6 billion. The costs of flood control projects under construction and under planning and design are about \$1 billion and \$0.3 billion respectively.

The flood prevention projects completed in recent years include Shenzhen River Regulation Project Stage III (2006, 4 km), Ping Yuen River (2006, 1.7 km), stormwater drainage improvement works from Tung Kwok Wai to San Wai, Fanling (2008, 1 km) and stormwater drainage improvement work in Shui Lau Hang, Ta Kwu Ling (2008, 0.5 km) and Ma Wat River Phase 1, Tai Po (2008, 1.8 km).

Planning, design and construction for another 15 km of river channels and 3.5 km of stormwater drains are underway, including the Ma Wat River Project Phase 2, improvement of stormwater drains in Fanling and Sheung Shui, and improvement of the tributaries of Ng Tung River, Sheung Yue River, Ping Yuen River and Ma Wat River. Construction works started progressively from 2006 for completion by 2012.

此外，我們亦根據在新界北區雨水排放整體計劃研究報告中的建議，規劃餘下約4.2公里的河道治理工程及1.5公里位於梧桐河、雙魚河及平原河支流的雨水渠改善工程。這些工程預計於二零一二年完成。



新河道面的草磚
Grasscrete panels on the new river channel

改善水浸情況

隨著深圳河治理第一期、第二期和第三期工程完成後，新界北部沿深圳河與平原河匯合處的低窪地帶的水浸情況已大大得到改善。而上水村、大頭嶺及松柏朗的鄉村，因著兩個防洪抽水站的落成，該地區的水浸情況亦得以紓緩。

過往被公認為水浸黑點的燕崗及河上鄉、石仔嶺、古洞、沙嶺及文錦渡路東的岔道，因著梧桐河下游及雙魚河下游工程竣工，水浸情況得到明顯改善。

上水華山、天平山、石湖新村、龍躍頭及軍地北的水浸情況亦因為梧桐河中游的主要工程竣工而得到大大改善。

位於坪輦和打鼓嶺一帶的水浸情況亦隨著平原河工程的完結而得以改善，當中包括簡頭圍、塘坊、鳳凰湖、週田村、老鼠嶺等村落。

In accordance with the recommendations made in the NNT Drainage Master Plan Study, we have commenced the planning of the remaining 4.2 km of drainage channels and 1.5 km of stormwater drains in the upper reaches of Ng Tung River, Sheung Yue River and Ping Yuen River. Works are scheduled for completion by 2012.



九龍坑東鐵路軌下的四條大型地下排水管道
The four large diameter stormwater conduits underneath East Rail embankment at Kau Lung Hang

Alleviation of the Flooding Situation

In the NNT, the flooding situation in low-lying areas along Shenzhen River downstream of the confluence with Ping Yuen River has been greatly improved with the completion of the Shenzhen River Regulation Project Stages I, II and III. Flooding in Sheung Shui Tsuen, Tai Tau Leng and Tsung Pak Long has also been alleviated with the completion of 2 village flood pumping schemes serving the low-lying villages.

The flooding situation at the previously renowned flooding black spots, namely Yin Kong and Ho Sheung Heung, Shek Tsai Leng, Kwu Tung, Sandy Ridge, and the slip road at the east of Man Kam To Road Check Point has been significantly improved after completion of the river training works at Lower Ng Tung River and Sheung Yue River.

The substantial completion of the river training works at the Middle Ng Tung River has brought significant improvement to the flooding situation near Sheung Shui Wa Shan, Tin Ping Shan, Shek Wu San Tsuen, Lung Yuek Tau and Kwan Tei North.

As a result of the completion of the Ping Yuen River training works, the previous flooding situation in Ping Che and Ta Kwu Ling, including Kan Tau Wai, Tong Fong, Fung Wong Wu, Chow Tin Tsuen and Lo Shue Ling has been improved.