

## 改善措施

在進行雨水排放系統整體計劃研究期間，鑑定了一些現有渠務系統的改善方案，現分類如下：

- 蓄洪 - 蓄洪池可用作儲存上游集水區的水流，減低下游的排水系統的高峰徑流。
- 雨水隧道 - 雨水隧道系統可將高地集水區的雨水直接引到大海，而毋須流經下游的市區，減低市區排水系統的負荷。
- 提升現有系統 - 這個方案藉擴闊、擴大或更換現有的排水系統，為管道、河流、明渠或暗渠進行局部改善工程。
- 鄉村防洪抽水計劃 - 這個計劃為低窪地區的鄉村設置泵房連防洪堤，將其圍封。防洪堤可防止洪水進入村內，而水泵可將村內的雨水抽出鄉村範圍。

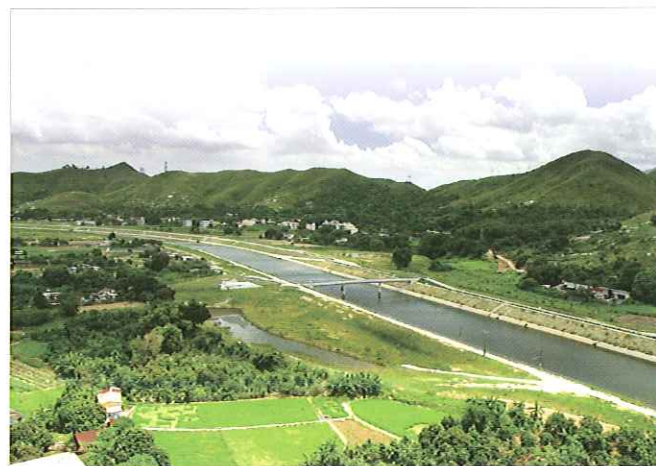
## Improvement Measures

During the course of the Stormwater Drainage Master Plan Studies, a number of drainage improvement options have been identified for the existing system. These can be categorised as follows:

- Flood Storage - Flood storage tanks are provided to retain the flow from upstream catchment such that the peak runoff for the downstream drainage system can be attenuated.
- Tunnelling - A tunnel system can divert storm flows from upland catchment directly into the sea instead of passing through the downstream urbanised areas. This can relieve the loading of the drainage system in the downstream urbanised areas.
- Expanded Existing System - This option involves local drainage improvement to the pipelines, rivers, nullahs or culverts by means of widening, enlargement or replacement of the existing drainage system.
- Village Flood Pumping Scheme - Protective bund with pumping station is provided for enclosing low-lying village. The bund can prevent flood water from entering the village. Rainwater collected in the village area is pumped to the streamcourses outside the bund.



二零零四年上水梧桐河一帶的水浸情況  
Flooding situation in the nearby area of Ng Tung River in 2004



經治理的梧桐河  
Trained Ng Tung River

# 雨水排放系統整體計劃

## Drainage Master Planning

渠務署自一九八九年九月成立以來，致力解決全港的水浸問題。當時新界北和西北的低窪地區經常受到嚴重的水浸影響。

另外，一些舊市區，如旺角及上環，屬於主要的住宅區和商業區。然而，這些地區現有的雨水排放系統是城市地區逐漸擴展時興建，只能應付當時的排放標準。多年以來，我們已為這些系統作多次的更新、改善和擴展，但仍然未能符合目前的防洪標準，暴雨經常引致水浸。為此，渠務署在一九九六年展開八項的雨水排放系統整體計劃，提供一個全面的方案以解決水浸問題。

Since establishment in September 1989, the Drainage Services Department has been working hard to relieve the flooding problem in the territory. At that time, serious flooding was frequent in the low-lying area in the North and Northwest New Territories.

In addition, in some old urbanised areas such as Mongkok and Sheung Wan with major residential and commercial developments, the existing stormwater drainage systems were built progressively as part of the urban extension meeting old drainage standards. Despite various local modifications, improvements and extensions to the system over the years, the systems are still inadequate to meet the current flood protection standards and flooding occurs frequently during heavy rainstorms. The Drainage Services Department therefore has commissioned since 1996 a series of 8 Stormwater Drainage Master Plan Studies to provide a comprehensive solution to the problem.



為大坑東蓄洪池所建的抽水泵房  
Pumping station for Tai Hung Tung Hood Storage Scheme

### 我們的抱負 Our Vision

提供世界級的污水和雨水處理排放服務，以促進香港的可持續發展。

To provide world-class wastewater and stormwater drainage services enabling the sustainable development of Hong Kong.

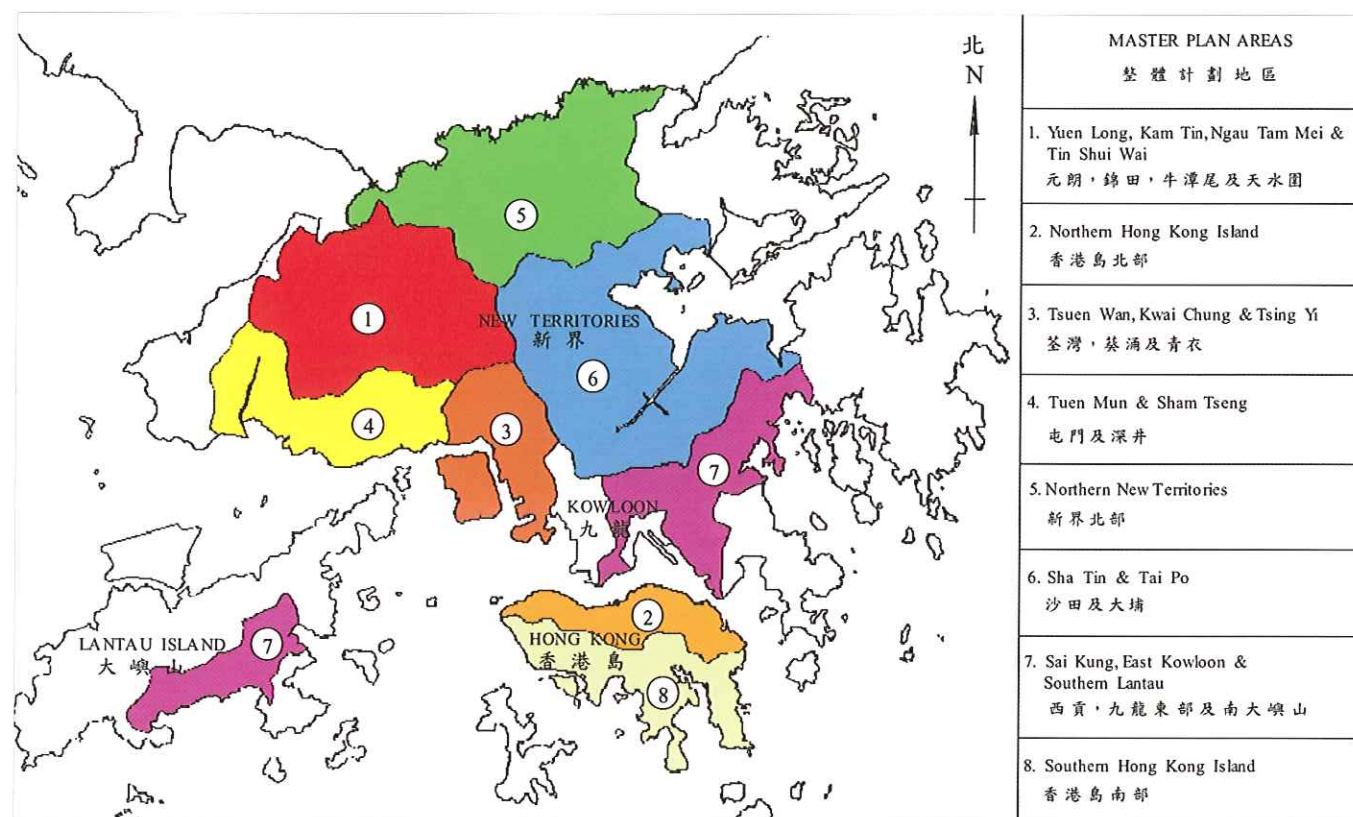


## 研究範圍

雨水排放系統整體計劃研究不但覆蓋新界北和西北嚴重受水浸影響的地區，如上水和元朗，還包括全港所有容易受水浸影響的地方。事實上，不同地區會受到不同程度的水浸影響，而水浸影響與洪水的深度、流量、重現期和所引致的損毀程度有著密切的關係。

## Study Areas

The Stormwater Drainage Master Plan Studies not only cater for the most severe flooding areas in North and Northwest New Territories such as Sheung Shui and Yuen Long, they also cover other flood prone areas in the territory. In fact, different areas would experience various degree of flooding and the impact of flooding is closely related to the water depth, velocity, its return period, and also the flood damage that will be induced.



雨水排放整體計劃表  
Drainage Master Plan

## 研究內容

研究的目的是以下四方面：

- 檢查和鑑定研究範圍內現有排水系統及相關設施不足之處；
- 建議和制定短期及長期改善措施，以符合現有標準和應付將來的需要，並評估該些措施的可行性和對交通及環境所造成的影響；
- 鑑定需要安裝流量和雨量測量站的重要位置，以便搜集相關資料用作評估水浸緩解措施的成效；以及
- 發展一個電腦化雨水排放系統資產儲存及管理系統，儲存和管理雨水排放系統的資料，作更佳的管理用途。

## Scope of the Studies

The purpose of the studies comprises four aspects as follows:

- Examine and identify the inadequacies of the existing stormwater drainage system and associated facilities within the study area;
- Recommend and design short and long term improvement measures to meet the current standard and future needs and assess their feasibility and impact on the traffic and environment;
- Identify suitable locations for rainfall and flow gauging stations so that data can be collected for assessing the effect of flood mitigation measures; and
- Develop a computerised stormwater drainage asset inventory and management system to help data storage and management of the stormwater drainage system.



啟德雨水轉運計劃隧道的內觀  
Interior View of Kai Tak Transfer Tunnel



經治理的錦田河  
Trained Kam Tin River



抽水泵房內的設施  
Facilities inside a Pumping Station



已完成的大坑東蓄洪池  
The completed Tai Hung Tung Flood Storage Tank