

TRANSFORMATION FROM RIVER CHANNELISATION TO RIVER REVITALISATION

Ir LEUNG Wah-ming, Richard Senior Engineer, Drainage Services Department Government of the HKSAR 25 November 2017 

High Annual Rainfall

Beijing
60Second
1300Hong Kong
2400Tokyo 1500
Taipei 2100Bangkok 1500Manila 2200Singapore 2200Jakarta 1700

Sydney 1200 Vancouver 1200

San Francisco 600

Santiago 300

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Source:

http://worldweather.wmo.int/en/home.html World Meteorological Organization: World Weather Information Service

Elooding in Hong Kong

D.









Concrete Channel

Good hydraulic performance

Flood Prevention Assets

Total Project Cost

~HK\$25 billion



- ~2400 km Drains
- ≻ ~360 km
- ≻ 4 nos.
- ≻ 3 nos.
- ≻ 27 nos.

River Channels Drainage Tunnels (~21km) Stormwater Storage Tanks Village Polder Schemes





Total Number of Flooding Blackspots

水浸黑點總數目









Concrete Channel

Keep building more concrete channel?

Greening & Vegetation

Ecological value?

Aesthetic Value?

Water friendliness?

While we have reliable drainage infrastructure...

it is time to think Blue Green





What we have done ...



Greening & Vegetation





Green Channel

What we have done ...



Ho Chung River

E BAME Habitat Improvements

Green Channel

What we have done ...



Upper Lam Tsuen River







Ecologically friendly

From Channelisation to Revitalisation

- Promote multi function of river channels
- Enhance ecological value and biodiversity
- Promote water friendliness
- Enhance flood resilience

Kai Tak River (under construction)





Tsui Ping River (under planning)



Connectivity

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From Channelisation to Revitalisation

25

Hydraulic Performance? Ecological Enhancement? Maintenance & Management? Cost/expertise?

Quick fix solution?

Site trial 1 - Ma Wat River



Site trial 1 - Ma Wat River



Site trial 2 - Lower Lam Tsuen River



Site trial 2 - Lower Lam Tsuen River



Way Forward

- > From grey to blue green
- Promote biodiversity
- Enhance the value of river channel
- Co-use of land
- Promote water friendliness
- Enhance liveability
 - Building resilience for adaptation of climate change



DSD ENDEAVOURS TO ADOPT CONCEPT OF WATER BODIES REVITALISATION

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